

PONY

# MATH

2025



3

PRIMARY  
FIRST TERM

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# Chapter 1

## Chapter Lessons

### Lesson 1

#### Patterns

##### Outcomes:

- Identifying repeating and arithmetic patterns.
- Determining the next two elements in a pattern.

### Lesson 2

#### More of Bar Graphs

##### Outcomes:

- Identifying elements of a bar graph.
- Organizing, representing, and analyzing data from a bar graph.

### Lesson 3

#### Line Plot

##### Outcomes:

- Identifying elements of a line plot.
- Collecting and recording data.
- Creating a line plot.

### Lessons 4–6

#### Measuring Lengths in (Centimeter, Meter, and Millimeter)

##### Outcomes:

- Discussing centimeter measurement.
- Measuring the length of objects in centimeters.
- Estimating the length of objects in centimeters and meters.
- Discussing meter measurement.
- Demonstrate understanding of the relationship between centimeters and meters.
- Determining whether to use centimeters or meters to measure length.
- Demonstrate understanding that centimeters are composed of millimeters.
- Measuring the length of objects in millimeters.
- Describing the pattern they observe when measuring the same object in millimeters and centimeters.



## Lesson

1

## Patterns

## Pattern

## Learn

A group of **numbers** or **shapes** that are repeated **regularly** according to a **specific rule**.

النمط هو مجموعة من الأعداد أو الأشكال أو الأشياء تتكرر بشكل منتظم، وفقاً لقاعدة محددة.

## Pattern

## Visual Pattern

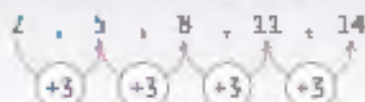
It is an ordered set of objects.



The pattern unit

## Numerical Pattern

It is a list of numbers that follow a certain rule.



The pattern rule is (+3)

## Activity 1

Match:

Ⓐ 3, 6, 9, 12, 15

Ⓑ 80, 70, 60, 50, 40

Ⓒ

Ⓓ

-10



+3



Visual pattern

النمط البصري

Pattern

الأنماط

Numerical pattern

النمط العددي

Pattern rule

قاعدة النمط

## Activity 2

Find out the pattern, then complete in the same sequence:

Ⓐ 22, 24, 26, 28, 30, 32, 34

Ⓑ 6, 12, 18, 24, 30, 36, 42

Ⓒ 90, 85, 80, 75, 70, 65, 60

Ⓓ 40, 36, 32, 28, 24, 20, 16



Rule

+2

+6

-5

-4



**Learn** The pattern rule can be increased or decreased by a specific rule and is not a fixed number.

القاعدة النمطية يمكن أن تزداد أو تقل بقاعدة محددة ولا تكون عدداً ثابتاً.

**Ex.** Note the following visual pattern:



The pattern key may not be a fixed number, it can also be incremented by a specific rule.

**Notes:**

- The pattern rule is increased by 2.



**Notes:**

- The pattern rule is decreased by 1.

Increased

يزيد

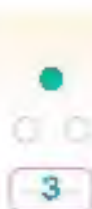
Decreased

يقل

**Activity 3**

Find out the pattern, then complete:

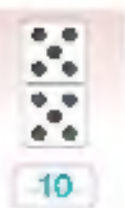
B



C



D



E



## Lesson 2

## More of Bar Graphs

مزيد من التمثيل البياني بالأعمدة

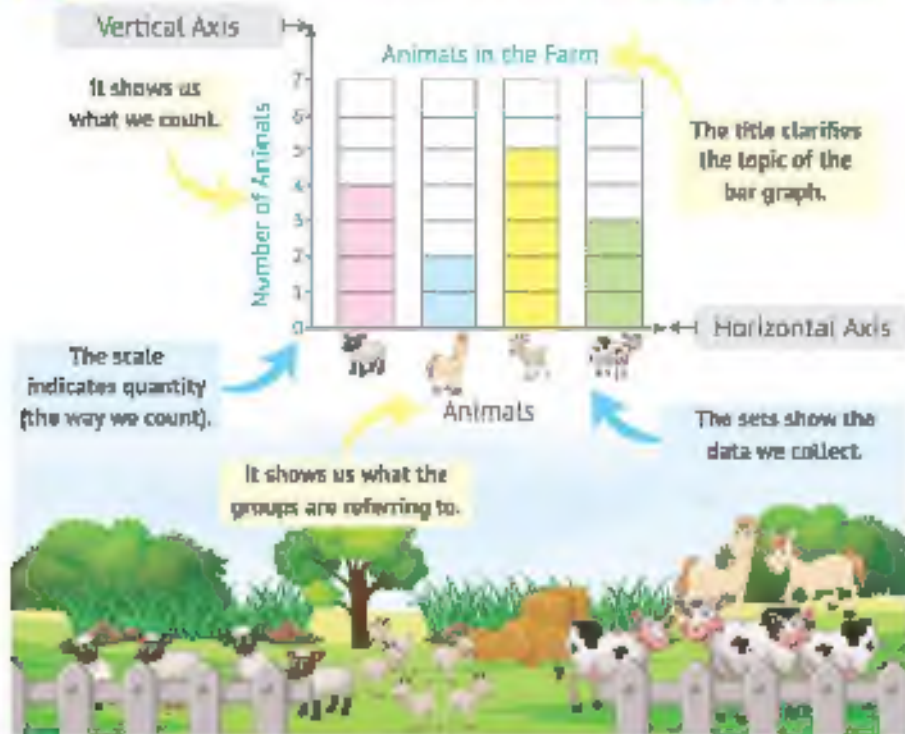
## Learn

## Representing Data Using a Bar Graph

It is the conversion of data and figures into drawings to facilitate studying and analysing the data.

التمثيل البياني بالأعمدة، هو تمثيل بياني تستخدم فيه الأعمدة ذات الأطوال أو الارتفاعات المختلفة لتمثيل البيانات التي تم جمعها.

**Ex.** The following bar graph shows the number of animals in the farm.



Horizontal axis

محور أفقي

Set

مجموعة

Vertical axis

محور رأسي

Scale

مقياس

## Activity 1

Look at the favorite fruit graph, then answer:



1 Complete the following table:

Favorite Fruit				
	Apple	Orange	Banana	Pear
Number of Students	30	60	50	40

2 How many students liked oranges?

60

3 How many students liked apples and bananas?

 $30 + 50 = 80$ 

4 How many students were asked about their favorite fruit?

 $30 + 60 + 50 + 40 = 180$ 

5 What is the least popular fruit on this graph?

Apples



## Learn

## Tally Marks

They are used to record votes or other items.



Each tally mark represents a number, until we reach the number 5. We draw the fifth mark above the other 4 for it to be a bundle.

كل علامة تمثل وحدة، وعند الوصول إلى خمس علامات نرسم العلامة الخامسة على العلامات الأربع الأولى ( ) وتسمى حزمة.

## Ex.

The following ice cream pieces show the store's sales: Make a tally table to count the ice cream pieces.



Ice Cream	Tally Marks	Number Frequency
		5
		10
		14
		7



Frequency

التكرار

Bundle

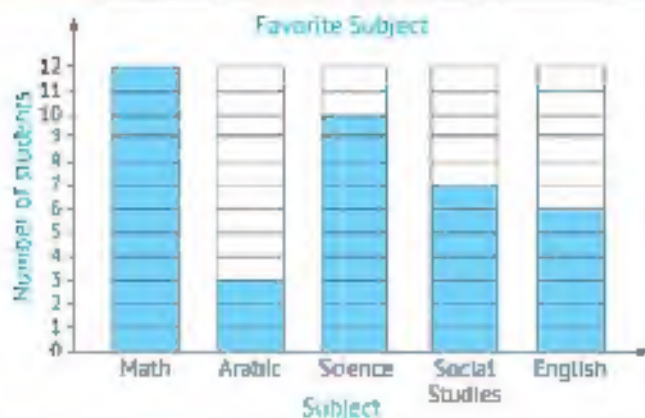
حزمة

## Activity 2

The following table shows the favorite subjects of a number of students. Complete the table and the bar graph, then answer the questions:

- ② Complete the following table:

Favorite Subject	Math	Arabic	Science	Social Studies	English
Tallies					
Number of Students	12	3	10	7	6



- ③ What is the **difference** between the number of students who prefer **math** and those who prefer **Arabic**?  
 $12 - 3 = 9$
- ④ What is the **total** number of students who prefer the **social studies** and who prefer the **Arabic**?  
 $7 + 3 = 10$
- ⑤ Arrange the preferred subjects in an **ascending** order according to (تصاعدياً) the number of students who prefer each of them.

**Arabic, English, Social Studies, Science, Math**

**Activity 3** Use the following table to complete the bar graph:

Favorite Desserts	Basbousa	Kunafa	Sweet Potatoes	Sweet Feteer	Om Ali
Tallies					
Number of Children	4	9	3	12	10



- How many children liked **Basbousa**? **9**
- How many children liked **Om Ali** and **Sweet Feteer**?  
 **$10 + 4 = 14$**
- Which dessert is liked **most**? **Sweet Feteer**
- Which dessert is liked **least**? **Sweet Potatoes**
- How many **more** students prefer **Sweet Feteer** than those who prefer **Sweet Potatoes**?  **$12 - 3 = 9$**



## Line Plot

التمثيل البياني بسقاط

### Learn

### Line Plot Graph

It is a method of displaying data using a number line by placing a sign 'x' above the line to indicate the number of repetitions.

هو طريقة تعرض البيانات باستخدام خط الأعداد بوضع علامة 'x' فوق الخط لتوضيح عدد التكرار.

### Ex.

The following numbers are the results from a test taken by a class of 24 students

16 14 17 11 14 19 11 17  
12 21 22 18 11 16 15 14  
18 12 13 16 17 15 13 17

To make a line plot out of these data

#### Step 1

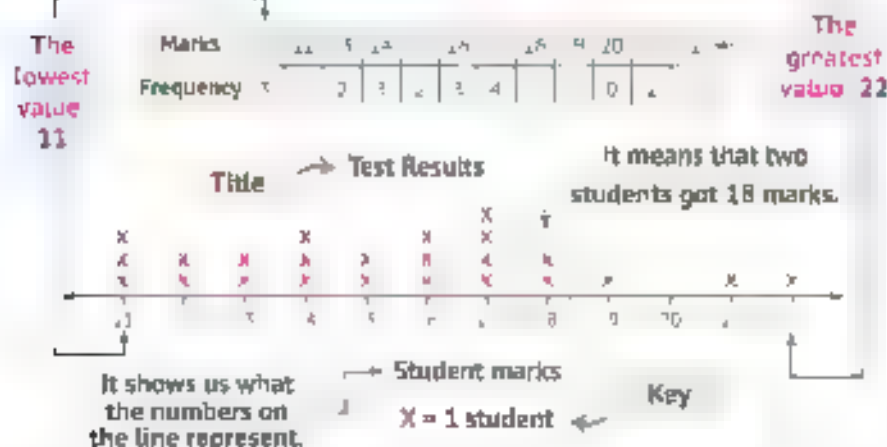
We determine the greatest and lowest value.

#### Step 2

We determine how often each value is repeated

#### Step 3

We put the numbers on the number line and put a mark 'x' above each value according to their frequency



Lowest value

Greatest value

أدنى قيمة Title

أعلى قيمة Key

عنوان

مفتاح





## Activity

Create a line plot using the **apples** in the basket data. Make sure to give your line plot a **title** and a **key**.



Ⓐ The lowest value is **15**      Ⓑ The greatest value is **22**

Ⓒ The number of times each number is repeated:

Number of Apples	15	16	17	18	19	20	21	22
Frequency	2	4	5	1	0	4	0	2

Ⓓ The line plot:



## Activity 2

The following data shows the weights of 20 children in kilograms. Create a line plot using these data:

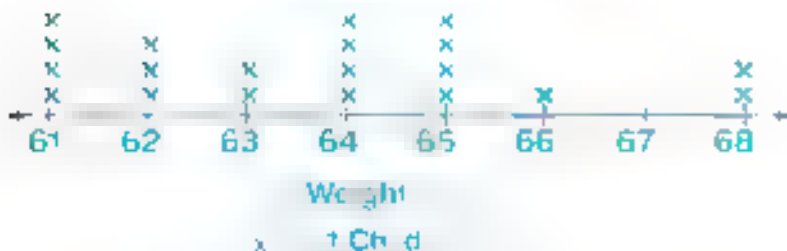
68 , 65 , 63    63 , 62 , 64    65 , 61    65 , 61  
64 , 61    64    66 , 64 , 62    61    62    68    65

- ① The lowest value is **61**  
 ② The greatest value is **68**  
 ③ The number of times each number is repeated:

Weight	61	62	63	64	65	66	67	68
Tallies								
Frequency	4	3	2	4	4	1	0	2

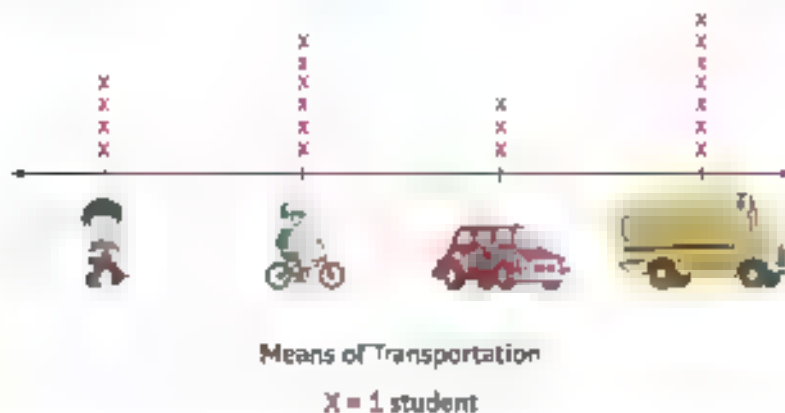
- ④ The line plot:

Children's Weights



## Activity

The following line plot represents the methods used by 20 students to reach school.



Answer the following question

1. How many students go to school by walking? **7**
2. How many students go to school by bicycling? **3**
3. How many students go to school by car? **6**
4. How many students go to school on bus? **4**
5. What is the difference in means of transportation for students? **Bus**
6. How many students go to school by car if all by walking?  **$7 - 6 = 1$**

## Measuring Lengths in (Centimeter, Meter, and Millimeter)

4-6

قياس لأطوال بالسنتيمتر والمتر والمليمتر

4.6



### Units of Measuring Length

Meter  
m

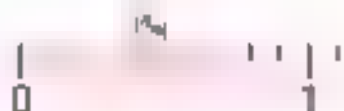
Centimeter  
cm

Centimeter  
cm

Millimeter  
mm

Millimeter  
mm

It is used to measure very small things, such as small insect, etc.



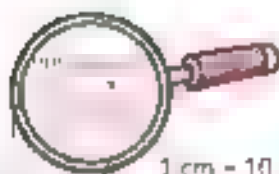
Centimeter  
cm

It is used to measure small things such as pens, books, etc.

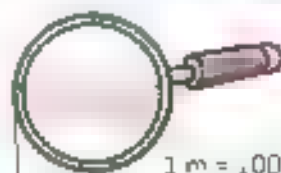


Meter  
m

It is used to measure tall objects, such as trees, buildings, etc.



1 cm = 10 mm



1 m = 100 cm

length

طول units

قياس Measuring

قياس



# Activity 1

See the pictures below. Determine what is the appropriate unit of length for measuring these things. then write 1 under each picture:

Milimeter mm, centimeter cm, or meter m.



Meter



Milimeter



Centimeter



Centimeter



Meter



Meter



Milimeter



Milimeter



Centimeter

A ruler is a measurement tool used to measure the length of small objects.

To use a ruler to measure the length of an object, such as a key:

1. Line up one end of the key with the zero mark on the ruler.

2. Find the centimeter mark on the ruler that is at the other end of the key.



5 centimeters

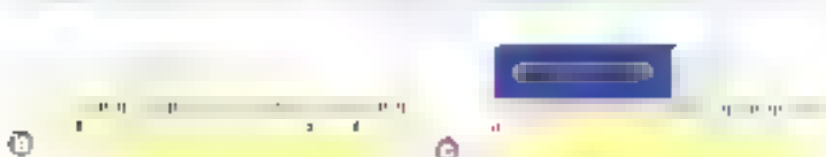
# Activity

Use the ruler to measure the length of each object in centimeters:

46

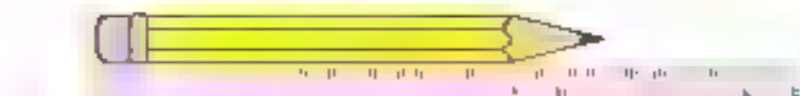


8 centimeters

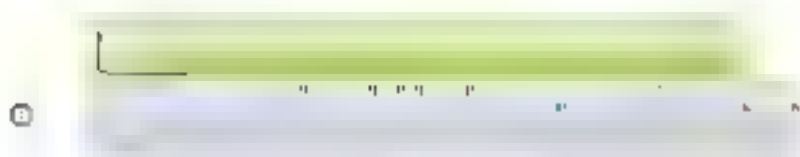


3 centimeters

5 centimeters



11 centimeters





14 centimeters

# Activity


Use a ruler to measure the length of each of the following in centimeters.


a  Length = 2 cm

c  Length = 3 cm

e  Length = 3 cm


d  Length = 5 cm

f  Length = 5 cm


b  Length = 6 cm


# Activity

Choose the appropriate length for each of the following.


a  (10 mm, 5 mm, 10 cm)

c  5 cm, 5 mm, 5 m

e  2 m, 5 cm, 5 mm

d  26 mm, 26 cm, 26 m

f  4 cm, 4 mm, 4 m

b  3 m, 2 cm, 2 mm

**Ex.**

$$1 \text{ meter} = 100 \text{ centimeters}$$

$$3 \text{ m} = 300 \text{ cm}$$

$$1 \text{ centimeter} = 10 \text{ millimeters}$$

$$4 \text{ cm} = 40 \text{ mm}$$

$$1 \text{ cm} = 10 \text{ mm}$$

$$10 \text{ cm} = 100 \text{ mm}$$

$$1 \text{ cm} = 10 \text{ mm}$$

$$(40 \text{ mm} = 4 \text{ cm})$$

**Activity**

Complete the following:

$$\textcircled{a} 3 \text{ meters} = 300 \text{ centimetres} \quad \textcircled{b} 800 \text{ centimetres} = 8 \text{ meters}$$

$$\textcircled{c} 1 \text{ m} = 100 \text{ cm} \quad \textcircled{d} 700 \text{ cm} = 7 \text{ m}$$

$$\textcircled{e} 8 \text{ m} = 800 \text{ cm} \quad \textcircled{f} 200 \text{ cm} = 2 \text{ m}$$

$$\textcircled{g} 1 \text{ centimetre} = 10 \text{ millimeters} \quad \textcircled{h} 50 \text{ millimeters} = 5 \text{ centimetre}$$

$$\textcircled{i} 70 \text{ centimetre} = 700 \text{ millimeters} \quad \textcircled{j} 180 \text{ millimeters} = 18 \text{ centimetre}$$

$$\textcircled{k} 3 \text{ cm} = 30 \text{ mm} \quad \textcircled{l} 600 \text{ mm} = 60 \text{ cm}$$

$$\textcircled{m} 14 \text{ cm} = 140 \text{ mm} \quad \textcircled{n} 120 \text{ mm} = 12 \text{ cm}$$

**Ex.**

$$5 \text{ m and } 24 \text{ cm} = \quad \text{cm} \quad \text{cm} = \frac{5 \text{ m}}{1} \text{ and } \frac{24 \text{ cm}}{1}$$

$$500 \text{ cm} + 24 \text{ cm}$$

$$4 \text{ cm and } 2 \text{ mm} = \quad \text{mm}$$

$$4 \text{ cm} = 20 \text{ mm}$$

$$40 \text{ cm} + 2 \text{ cm}$$

$$42 \text{ cm and } 2 \text{ mm}$$

$$42 \text{ cm} + 2 \text{ mm}$$

**Activity**

Complete the following:

$$\textcircled{a} 3 \text{ m and } 72 \text{ cm} = 372 \text{ cm} \quad \textcircled{b} 3 \text{ cm and } 7 \text{ mm} = 37 \text{ mm}$$

$$\textcircled{c} 5 \text{ m and } 20 \text{ cm} = 520 \text{ cm} \quad \textcircled{d} 10 \text{ cm and } 5 \text{ mm} = 105 \text{ mm}$$

$$\textcircled{e} 7 \text{ m and } 3 \text{ cm} = 703 \text{ cm} \quad \textcircled{f} 32 \text{ cm and } 4 \text{ mm} = 324 \text{ mm}$$

$$\textcircled{g} 382 \text{ cm} = 3 \text{ m and } 82 \text{ cm} \quad \textcircled{h} 96 \text{ mm} = 9 \text{ cm and } 6 \text{ mm}$$

$$\textcircled{i} 950 \text{ cm} = 9 \text{ m and } 50 \text{ cm} \quad \textcircled{j} 208 \text{ mm} = 20 \text{ cm and } 8 \text{ mm}$$

$$\textcircled{k} 407 \text{ cm} = 4 \text{ m and } 7 \text{ cm} \quad \textcircled{l} 725 \text{ mm} = 72 \text{ cm and } 5 \text{ mm}$$



# Chapter

## 2



### Lessons 1–4 Thousands, Ten Thousands, and Hundred Thousands Numbers in Different Forms

- **Outcome**  
Representing the place value of a digit in a large number in place value notation (using marking) and in expanded form with high- and low-value digits using number tiles or base ten blocks in standard form. Representing large numbers in the base ten place-value expanded form (base ten blocks, number tiles).
- **Learning Objectives**  
Representing large numbers in the standard form, place value notation, and in number tiles. Representing large numbers in the base ten place-value expanded form (base ten blocks, number tiles).
- **Learning Objectives**  
Representing large numbers in the base ten place-value expanded form (using a variety of number up to the hundred thousands place).

### Lesson 5 Arrays

- **Outcome**  
Using a variety of strategies (skip counting, number lines, place value) to solve multiplication problems. Solving various addition problems.

### Lesson 6 Multiplication

- **Outcome**  
Representing multiplication groups using number lines, skip counting, multiplication, and other strategies. Solving multiplication problems using the equal groups.

### Lesson 7 Commutative Property in Multiplication

#### Outcomes

- **Solving multiplication problems**  
Using arrays.  
Verifying the Commutative Property of Multiplication using arrays.  
Using a variety of methods for multiplication (skip counting, number lines, place value, multiplication).

## Lessons

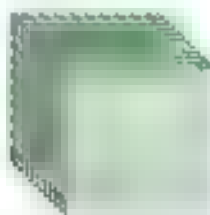
## Thousands, Ten Thousands, and Hundred Thousands Numbers in Different Forms

الآلاف - عشرات الآلاف ومئات الآلاف - صيغ مختلفة لكتابة الأعداد

## First, Reading and Writing Numbers Up to 999,999

## Remember

0	Zero	10	Ten		
	One	11	Eleven		
2	Two	12	Twelve	20	Twenty
3	Three	13	Thirteen	30	Thirty
4	Four	14	Fourteen	40	Forty
5	Five	15	Fifteen	50	Fifty
6	Six	16	Sixteen	60	Sixty
7	Seven	17	Seventeen	70	Seventy
8	Eight	18	Eighteen	80	Eighty
9	Nine	19	Nineteen	90	Ninety
				100	Hundred



10 hundreds = 1,000  
one thousand

4 digit number

عدد مكون من 4 أرقام

Digit

رقم

Number

عدد

5 digit number

عدد مكون من 5 أرقام

5-digit number

عدد مكون من 5 أرقام



## Thousands (4-digit Numbers)



الصيغة العددية (المعيارية) **Standard Form**

4 538

الصيغة اللفظية **Word Form**

Four thousand, five hundred and thirty-eight.

الصيغة اللفظية المختصرة **Short-word Form**

4 thousand, 538

## 5-digit Numbers (Ten Thousands)



**Standard Form**

58,426

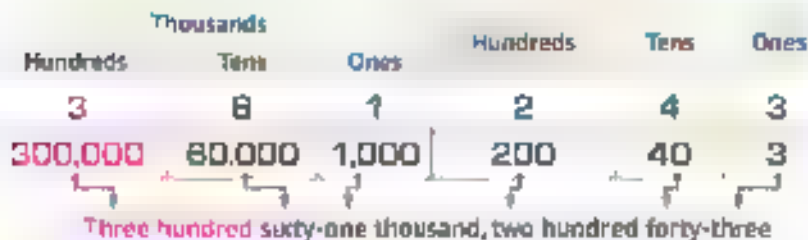
**Word Form**

Fifty-eight thousand, four hundred twenty-six.

**Short-word Form**

58 thousand, 426

## 6-digit Numbers (Hundred Thousands)



Standard Form

361 243

Word Form

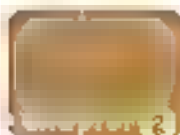
Three hundred sixty-one thousand,  
two hundred forty-three.

Short-word Form

361 thousand, 243

Ex.

- 3,000 is read as Three thousand.
- 3,405 is read as Three thousand, four hundred five.
- 3,050 is read as Three thousand, fifty.
- 3,456 is read as Three thousand, four hundred fifty-six.
- 20,000 is read as Twenty thousand.
- 23,000 is read as Twenty three thousand.
- 24,415 is read as Twenty-three thousand, four hundred fifteen.
- 23,045 is read as Twenty-three thousand, forty-five.
- 23,456 is read as Twenty three thousand, four hundred fifty six.
- 200,000 is read as Two hundred thousand.
- 256,003 is read as Two hundred fifty-six thousand, three.
- 256,720 is read as Two hundred fifty-six thousand, seven hundred twenty.
- 256,723 is read as Two hundred fifty-six thousand, seven hundred twenty-three.



# Activity

Write the number shown on the figure.

Q



Standard Form 3 844

Word Form Three thousand  
eight hundred forty-four

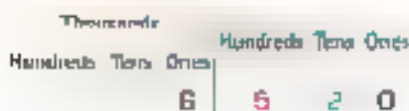
Q



Standard Form 5,028

Word Form Five thousand  
twenty-eight

Q



Standard Form 6 520

Word Form Six thousand  
five hundred twenty

Q



Standard Form 4 708

Word Form Four thousand,  
Seven hundred-eight

Q



Standard Form 24 035

Word Form Twenty-four  
thousand, thirty-five

Q



Standard Form 79 380

Word Form Seventy-nine thousand  
three hundred eighty



B

Thousands			Hundreds Tens Ones		
Hundreds	Tens	Ones	Hundreds	Tens	Ones
3	6	2	4	4	0

Standard Form: **362,440**

Word Form: Three hundred sixty-two thousand, four hundred forty

D

Thousands			Hundreds Tens Ones		
Hundreds	Tens	Ones	Hundreds	Tens	Ones
2	0	0	0	4	0

Standard Form: **200,040**

Word Form: Two hundred thousand, forty

**Activity**

Complete the following:

B

Thousands			Hundreds Tens Ones		
Hundreds	Tens	Ones	Hundreds	Tens	Ones
	8		5	6	0

Standard Form: **8,560**

Word Form: Eight thousand, five hundred sixty

D

Thousands			Hundreds Tens Ones		
Hundreds	Tens	Ones	Hundreds	Tens	Ones
6	0		4	1	5

Standard Form: **60,415**

Word Form: Sixty thousand, four hundred fifteen

B

Thousands			Hundreds Tens Ones		
Hundreds	Tens	Ones	Hundreds	Tens	Ones
8	0	2	3	1	5

Standard Form: **802,315**

Word Form: Eight hundred two thousand, three hundred fifteen

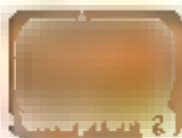
D

Thousands			Hundreds Tens Ones		
Hundreds	Tens	Ones	Hundreds	Tens	Ones
3	5	7	4		

Standard Form: **3,574**

Word Form: Three thousand, five hundred seventy-four





12

Thousands			Hundreds Tens Ones		
Hundreds	Tens	Ones	Hundreds	Tens	Ones
	9	7	4	5	8
Standard Form			97,458		

Word Form: **twenty-seven thousand, four hundred fifty eight**

13

Thousands			Hundreds Tens Ones		
Hundreds	Tens	Ones	Hundreds	Tens	Ones
8	2	4	2	3	1
Standard Form			824,231		

Word Form: **Eight hundred twenty four thousand, two hundred thirty one**

## Activity 3

Write the following in the standard form.

Ⓐ Five thousand, three hundred sixteen **5,316**

Ⓑ Eighty four thousand two hundred twenty-four **84 224**

Ⓒ Nine hundred sixty-three thousand eight hundred seven **903,807**

Ⓓ Nineteen thousand twenty seven. **19 027**

Ⓔ Three hundred thousand sixteen **300 016**

## Activity 4

Write the following in the word form.

Ⓐ 5 230 **Five thousand, two hundred thirty**

Ⓑ 45,030 **Forty-five thousand thirty**

Ⓒ 50 108 **Fifty thousand, one hundred eight**

Ⓓ 340,008 **Three hundred forty thousand, eight**

Ⓔ 503,160 **Five hundred three thousand, one hundred sixty**

## Second- The Place Value

Lesson

Place value					
Hundred thousands	Ten thousands	Thousands	Hundreds	Tens	Ones
↓	↓	↓	↓	↓	↓
6	4	5	8	3	2
600,000	40,000	5,000	800	30	2
value					

From the previous, we can understand that:

**6** is in the **Hundred Thousands** place

So

- The place value of the digit 6 is **hundred thousands**.
- The value of the digit 6 is **600,000**.

**4** is in the **Ten Thousands** place

So

- The place value of the digit 4 is **ten thousands**.
- The value of the digit 4 is **40,000**.

**5** is in the **Thousands** place

So

- The place value of the digit 5 is **thousands**.
- The value of the digit 5 is **5,000**.

**8** is in the **Hundreds** place

So

- The place value of the digit 8 is **hundreds**.
- The value of the digit 8 is **800**.

**3** is in the **Tens** place

So

- The place value of the digit 3 is **tens**.
- The value of the digit 3 is **30**.

**2** is in the **Ones** place

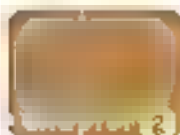
So

- The place value of the digit 2 is **ones**.
- The value of the digit 2 is **2**.

Place value

القيمة مكانية Value

القيمة العددية



## Activity 1

Write the **value** and **place value** of the encircled digit

Number	Value	Place Value
Ⓐ 2 3 5 6	2000	Thousands
Ⓑ 5 2 0 9	200	Hundreds
Ⓒ 3,0 1 2	2	Ones
Ⓓ 7 8 9 6	90	Tens
Ⓔ 3, 0 5 0	0	Hundreds

## Ex.

$$\textcircled{A} 50,000 = 500 \overset{00}{\text{Hundreds}}$$

$$\textcircled{B} 70 \overset{000}{\text{Thousands}} = 70,000$$

$$\textcircled{C} 60 \overset{000}{\text{Thousands}} = 600 \overset{00}{\text{Hundreds}}$$

## Activity 2

Complete:

$$\textcircled{A} 20 \text{ Hundreds} = 2,000$$

$$\textcircled{B} 80,000 = 800 \text{ Hundreds}$$

$$\textcircled{C} 10,000 \text{ Tens} = 100,000$$

$$\textcircled{D} 5,000 = 5 \text{ Thousands}$$

$$\textcircled{E} 70 \text{ Thousands} = 700 \text{ Hundreds} \quad \textcircled{F} 600 \text{ Thousands} = 60,000 \text{ Tens}$$

$$\textcircled{G} 500 \text{ Hundreds} = 5,000 \text{ Tens} \quad \textcircled{H} 3,000 \text{ Tens} = 30 \text{ Thousands}$$

$$\textcircled{I} 6,000 \text{ Ones} = 60 \text{ Hundreds} \quad \textcircled{J} 200 \text{ Hundreds} = 20 \text{ Thousands}$$



### Note:

Place value can be used to write numbers in two forms.

#### Expanded Form

723,156

$$700,000 + 20,000 + 3,000 + 100 + 50 + 6$$

723 Thousands + 1 Hundred + 5 Tens + 6 Ones

### Activity

Write the following in the expanded form:

Ⓐ 360,459 = 300,000 + 60,000 + 400 + 50 + 9

Ⓑ 91,724 = 90,000 + 1,000 + 700 + 20 + 4

Ⓒ 600,531 = 600,000 + 500 + 30 + 1

Ⓓ 204,508 = 200,000 + 4,000 + 500 + 8

Ⓔ 250,008 = 200,000 + 50,000 + 8

### Activity

Write the following in the units form:

Ⓐ 3,892 = 3 Thousands + 8 Hundreds + 9 Tens + 2 Ones

Ⓑ 52,023 = 52 Thousands + 0 Hundreds + 2 Tens + 3 Ones

Ⓒ 602,025 = 602 Thousands + 0 Hundreds + 2 Tens + 5 Ones

Ⓓ 65,715 = 1 Ten + 7 Hundreds + 65 Thousands + 5 Ones

Ⓔ 200,032 = 2 Ones + 0 Hundreds + 200 Thousands + 3 Tens

### Activity 3

Write the following numbers in expanded form and unit's form:

$$\textcircled{a} 45\,237 = 45 \text{ Thousands} + 2 \text{ Hundreds} + 3 \text{ Tens} + 7 \text{ Ones}$$

$$45\,237 = 40\,000 + 5\,000 + 200 + 30 + 7$$

$$\textcircled{b} 15\,028 = 15 \text{ Thousands} + 0 \text{ Hundreds} + 2 \text{ Tens} + 8 \text{ Ones}$$

$$15\,028 = 10\,000 + 5\,000 + 20 + 8$$

$$\textcircled{c} 300\,080 = 300 \text{ Thousands} + 0 \text{ Hundreds} + 8 \text{ Tens} + 0 \text{ Ones}$$

$$300\,080 = 300\,000 + 80$$

### Activity 3

Complete the following:

$$\textcircled{a} 5\,000 + 200 + 30 + 4 = 5\,234$$

$$\textcircled{b} 5 + 300 + 5\,000 + 80 = 5\,385$$

$$\textcircled{c} 900 + 30\,000 + 7\,000 + 50 + 2 = 37\,952$$

$$\textcircled{d} 80 + 9\,000 + 300\,000 + 50\,000 + 4 + 200 = 359\,284$$

$$\textcircled{e} 90\,000 + 500 = 90\,500$$

$$\textcircled{f} 800\,000 + 50 + 3 = 800\,053$$

$$\textcircled{g} 245 \text{ Thousands} + 7 \text{ Hundreds} + 6 \text{ Tens} + 3 \text{ Ones} = 245\,763$$

$$\textcircled{h} 2 \text{ Hundreds} + 25 \text{ Thousands} + 3 \text{ Ones} = 25\,203$$

### Third: Comparing and Ordering Numbers Up to 999,999

#### Learn

To compare two numbers, do the following:

**First:** If the number of digits of each number is **different**,

- The number that has **more** digits is the **greater**.

<b>Ex.</b>	210,106	>	81,016
	• Six digits		• Five digits

**Second:** If the number of digits of each number is **equal**,

- Compare the **value** of the digits of the two numbers from **left to right**.

#### Ex.

○  $245,568 < 567,984$     ○  $78,620 > 76,902$     ○  $932,105 < 958,601$

► Because the value of the digit 5 is **greater** than the value of the digit 2.

► Because the value of the digit 8 is **greater** than the value of the digit 6.

► Because the value of the digit 8 is **greater** than the value of the digit 2.



Different forms can be converted to the **standard form** to facilitate the comparison process.





### Activity

Complete using (< or >)

Ⓐ 75,687 < 84,023

Ⓐ 4 363 < 40,000 + 30 + 600 + 3,000

Ⓑ 7,488 > 71,848

Ⓐ 80 Thousands < 80,000 Tens

Ⓐ 9 009 < 10,000

Ⓐ 920 Hundreds = 92,000 Ones

Ⓐ 85 102 < 85 120

Ⓐ 5,000 + 7 > 50 + 0 + 0 + 7

Ⓐ 82 Thousands + 5 Ones + 3 Tens + 4 Hundreds < 82 534

From the **smallest** number  
to the **greatest** number

From the **greatest** number  
to the **smallest** number

### Activity

Arrange in an ascending order

Ⓐ 53,068   94 760   68,078   49 298   57,680

49 298   53 068   57 680   68 078   94 760

Ⓐ 700 415   700,514   700.145   700 541   700,451

700 145   700,415   700.451   700 514   700,541

Ⓐ 20.200   2,0002   200   20,020   2 222

200   2.222   20,002   20 020   20 200

**Activity****Arrange in a descending order**

80,102    30,999    50,103    70,000    50,680

**80,102    70,000    50,680    50,103    30,999**

600,519    600,195    600,591    600,915    600,159

**600,915    600,591    600,519    600,195    600,159**

70,000    7,000    7,770    70,070    70,007

**70,070    70,007    70,000    7,770    7,000**

**Notes:**

- 4-digit number is **1,000**
- 5-digit number is **10,000**
- 6-digit number is **100,000**

- 4-digit number is **9,999**
- 5-digit number is **99,999**
- 6-digit number is **999,999**

- 4-same-digit number is **1,111**
- 5-same-digit number is **11,111**
- 6-same-digit number is **111,111**

- 4-same-digit number is **9,999**
- 5-same-digit number is **99,999**
- 6-same-digit number is **999,999**

- 4-different-digit number is **1,023**
- 5-different-digit number is **10,234**
- 6-different-digit number is **102,345**

- 4-different-digit number is **9,876**
- 5-different-digit number is **98,765**
- 6-different-digit number is **987,654**



To obtain the **greatest** number of given digits, arrange the digits from **greatest** to **least** from left to right.

**Ex.** The **greatest** number formed from the digits

6, 5, 4 and 8 is **8,654**



To obtain the **smallest** number of given digits, arrange the digits from **least** to **greatest** from left to right.

**Ex.** 1 The **smallest** number formed from the digits:

9, 3, 5, 2, 7 and 1 is **123,579**

2 The **smallest** number formed from the digits:

3, 9, 5, 0, 8 and 4 is **304,589**

Zero cannot be placed to the left, so it is swapped with the next number.

**Ex.** From the digits 5 and 3.

The **greatest** 4-digit number is **5,553**

The **smallest** 5-digit number is **33,335**

**Ex.** From the digits 6, 5, and 3

The **greatest** 4-digit number is **6,653**

The **smallest** 6-digit number is **3,3,3,356**



To obtain a 4, 5 or 6-digit number while having fewer digits

If the **greatest** number is required we repeat the **largest** digit

If the **smallest** number is required we repeat the **smallest** digit

**Activity** Complete

- Ⓐ The **smallest** number formed from the digits 3, 4, 8, and 9 is **3,489**
- Ⓑ The **greatest** number formed from the digits 9, 7, 5, and 4 is **97,542**
- Ⓒ The **smallest** number formed from the digits 3, 0, 4, and 6 is **30,468**
- Ⓓ The **greatest** number formed from the digits 6, 3, and 0 is **6,310**
- Ⓔ The **greatest** 4-digit number is **9,999**
- Ⓕ The **smallest** 6-digit number is **100,000**
- Ⓖ The **smallest** 4-digit number formed from the digits 5 and 8 is **5,558**
- Ⓗ The **greatest** 5-digit number formed from the digits 7 and 3 is **777,73**
- Ⓘ The **smallest** 6-digit number formed from the digits 3 and 5 is **333,357**
- Ⓚ The **greatest** 6-digit number formed from the digits 0 and 2 is **200,042**

**Ex.**

- The number 56,258 comes just **after** 56,257
- The number that comes just **after** 56,258 is 56,259
- The number 336,999 comes just **before** 337,000
- The number that comes just **before** 336,999 is 336,998.

**Activity** The number that comes just after

- Ⓐ 35,783 is **35,784**      Ⓒ 315,099 is **315,100**
- Ⓑ 68,029 is **68,030**      Ⓓ 820,999 is **821,000**

**Activity** The number that comes just before

- Ⓐ 370,689 is **370,688**      Ⓒ 13,000 is **12,999**
- Ⓑ 582,540 is **582,539**      Ⓓ 50,000 is **49,999**

## Lesson 1

## Arrays

## بوصفوفات

## Learn

## An Array

It is a collection of objects arranged in horizontal rows and vertical columns completed with no empty spaces.

تتكون مجموعة من الأشياء مرتبة في صفوف افقية وعموديه ممتلئة بأكملها بدون فراغ.

## In the opposite array

The number of rows is

The number of strawberries in each row is

Total number of strawberries is

$$+ + + + + = 5 \text{ strawberries}$$

The number of column is

The number of strawberries in each

column is

Total number of strawberries is

$$3 + 3 + 3 + 3 + 3 = 15 \text{ strawberries}$$



rows of



or

columns of



Column

عمود Row

Row

# Activity

Look at each array, then complete:

- ① The number of rows is **3**

The number of balls in each row is **6**

Total number of balls is

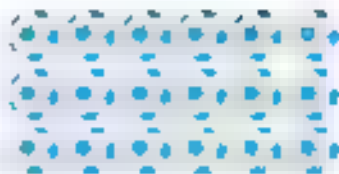
$$6 + 6 + 6 = 18 \text{ balls}$$

- The number of columns is **6**

The number of balls in each column is **3**

Total number of balls is  $3 + 3 + 3 + 3 + 3 + 3 = 18$  balls.

- **3** rows of **6** or **6** columns of **3**



- ② The number of rows is **3**

The number of tomatoes in each row is **5**

Total number of tomatoes is

$$5 + 5 + 5 = 15 \text{ tomatoes}$$

- The number of columns is **5**

The number of tomatoes in each column is **3**

Total number of tomatoes is  $3 + 3 + 3 + 3 + 3 = 15$  tomatoes

**3** rows of **5** or **5** columns of **3**



- ③ The number of rows is **4**

The number of cars in each row is **3**

Total number of cars is

$$3 + 3 + 3 + 3 = 12 \text{ cars}$$

The number of columns is **3**

The number of cars in each column is **4**

- Total number of cars is  $4 + 4 + 4 = 12$  cars.

- **4** rows of **3** or **3** columns of **4**



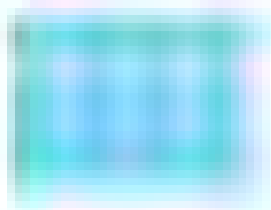




### Activity

Create an array

2



3 rows of 4

3



6 columns of 3

### Activity

Calculate the total number of objects in each array

8



The total number is  $4 + 4 + 4$   
 $= 12$

9



The total number is  $5 + 5 + 5 + 5$   
 $= 20$

10



The total number is  $3 + 3 + 3$   
 $= 9$

11



The total number is  $5 + 5$   
 $= 10$

### Activity

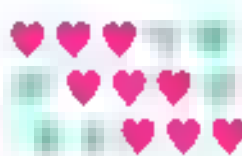
Complete the missing elements in the arrays, then find the total number

12



The total number is  $4 + 4 + 4 + 4$   
 $= 16$

13



The total number is  $5 + 5 + 5$   
 $= 15$

## Lesson 1

## Multiplication

## مفهوم الضرب

6

## Learn

The multiplication is a repeated addition

► In the following figure:



4 groups of ducks, each group consists of 3 ducks

The total number of ducks is  $3 + 3 + 3 + 3 = 12$  ducks

Adding 3 is repeated for 4 times, so we can use the concept of multiplication

$$\begin{array}{ccccccc}
 4 & \times & 3 & = & 12 \\
 \hline
 \end{array}$$

Number of groups **Factor**      Multiplication symbol **Times**      Number of ducks in each group **Factor**      The result of multiplication **Product**

## Activity

Complete as in the example

Ex.

Repeated addition:  $4 + 4 + 4 + 4 =$       Multiplication:  $4 \times 4 =$ 

Product	نتيجة الجمع	Multiplication	الضرب	Symbol	رمز
Concept	مفهوم	Times	مرات	Factor	عاصر
Repeated addition			الجمع بالتكرار		



Repeated addition

$$6 + 6 + 6 + 6 = 24$$

Multiplication:  $4 \times 6 = 24$



Repeated addition

$$5 + 5 + 5 = 15$$

Multiplication:  $3 \times 5 = 15$



Repeated addition

$$4 + 4 + 4 + 4 + 4 = 20$$

Multiplication:  $5 \times 4 = 20$

### Activity

Complete as in the example.

**Ex.**  $5 + 5 + 5 + 5 + 5 + 5$  So,  $\times$  and

③  $3 + 3 + 3 + 3 + 3 + 3 = 18$

So,  $6 \times 3 = 18$  and  $3 \times 6 = 18$

④  $4 + 4 + 4 + 4 + 4 = 20$

So,  $5 \times 4 = 20$  and  $4 \times 5 = 20$

⑤  $6 + 6 + 6 = 18$

So,  $3 \times 6 = 18$  and  $6 \times 3 = 18$

⑥  $2 + 2 + 2 + 2 = 8$

So,  $4 \times 2 = 8$  and  $2 \times 4 = 8$

⑦  $4 \times 4 = 4 + 4 + 4 + 4 + 4 + 4 + 4 + 4$

⑧  $7 \times 4 = 7 + 7 + 7 + 7$

⑨  $5 \times 8 = 8 + 8 + 8 + 8 + 8$

⑩  $3 \times 6 = 3 + 3 + 3 + 3 + 3 + 3$

# **Learn**

## **The Array and Multiplication**

3 rows of 5 butterflies,

To find the total number of butterflies,

we can use

**Repeated addition**  $5 + 5 + 5 = 15$  butterflies

**Multiplication**  $3 \times 5 = 15$  butterflies

Number  
of rows

Product (total)

Number in each row

We say  
3 times 5  
equals 15



5 columns of 3 butterflies

To find the total number of butterflies, we

can use

**Repeated addition**  $3 + 3 + 3 + 3 + 3 = 15$  butterflies

**Multiplication**  $5 \times 3 = 15$  butterflies

Number of  
columns

Product (total)

Number in each column

We say  
5 times 3  
equals 15



## **Activity**

Complete each of the following.

①



3 rows of 5

$$3 \times 5 = 15$$

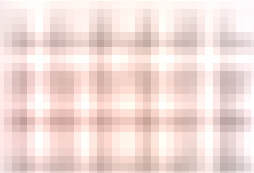
②



4 rows of 4

$$4 \times 4 = 16$$

③



4 rows of 6

$$4 \times 6 = 24$$



①



6 columns of 3

$$6 \times 3 = 18$$

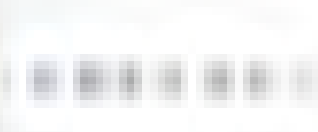
②



5 columns of 2

$$5 \times 2 = 10$$

③



6 columns of 1

$$6 \times 1 = 6$$

### Activity

Draw an array that matches the multiplication.

Then use repeated addition to find the product of the multiplication:

①

$$5 \times 4$$



$$\begin{array}{l} \text{Add } 4 + 4 + 4 + 4 + 4 \\ = 20 \end{array}$$

②

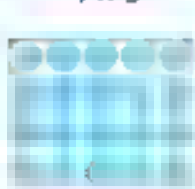
$$3 \times 6$$



$$\begin{array}{l} \text{Add } 6 + 6 + 6 \\ = 18 \end{array}$$

③

$$4 \times 5$$



$$\begin{array}{l} \text{Add } 5 + 5 + 5 + 5 \\ = 20 \end{array}$$

④

$$6 \times 3$$



$$\begin{array}{l} \text{Add } 3 + 3 + 3 + 3 + 3 + 3 \\ = 18 \end{array}$$

# Lesson Commutative Property of Multiplication

خاصية الإبدال في الضرب



## Example 1

The following array is

4 rows of 3 fish

Add

$$3 + 3 + 3 + 3 = 12$$

Multiply

$$4 \times 3 = 12$$



The following array is

4 rows of 3 fish

Add

$$4 + 4 + 4 + 4 = 16$$

Multiply

$$3 \times 4 = 12$$



$$\text{So } 3 \times 4 = 4 \times 3 = 12$$

This means:

Switching the factors of the multiplication operation does not affect the product of the multiplication, and it is called

**The Commutative Property of Multiplication**

بدون تأثير عوامل عملية الضرب ، تسمى خاصية الإبدال في الضرب

**Ex.**

5 rows of 3

$$5 \times 3 = 15$$



3 rows of 5

$$3 \times 5 = 15$$



$$\text{So, } 5 \times 3 = 3 \times 5$$

Property

خاصية Commutative

الإبدال





## Activity

Complete using the Commutative Property of Multiplication

1



2 rows of 4

$$2 \times 4 = 8$$

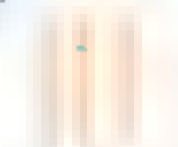


4 rows of 2

$$4 \times 2 = 8$$

$$\text{So, } 2 \times 4 = 4 \times 2$$

2



4 rows of 3

$$4 \times 3 = 12$$



3 rows of 4

$$3 \times 4 = 12$$

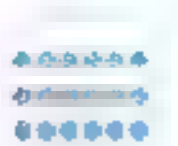
$$\text{So, } 4 \times 3 = 3 \times 4$$

3



6 rows of 3

$$6 \times 3 = 18$$

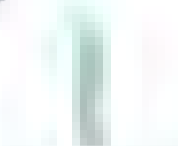


3 rows of 6

$$3 \times 6 = 18$$

$$\text{So, } 6 \times 3 = 3 \times 6$$

4



6 rows of 1

$$6 \times 1 = 6$$



1 rows of 6

$$1 \times 6 = 6$$

$$\text{So, } 6 \times 1 = 1 \times 6$$

5



$$5 \times 2 = 10$$



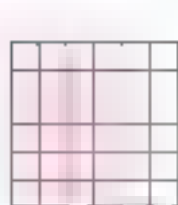
$$2 \times 5 = 10$$

$$\text{So, } 5 \times 2 = 2 \times 5$$

6



$$4 \times 6 = 24$$



$$6 \times 4 = 24$$

$$\text{So, } 4 \times 6 = 6 \times 4$$

## Activity 2

Write the multiplication sentence of each array, then draw the array that shows the Commutative Property

6



3 rows of 4

$$3 \times 4 = 12$$

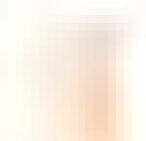


4 rows of 3

$$4 \times 3 = 12$$

So,  $3 \times 4 = 4 \times 3$

6



4 rows of 2

$$4 \times 2 = 8$$

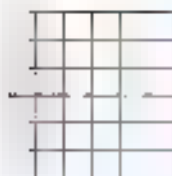


2 rows of 4

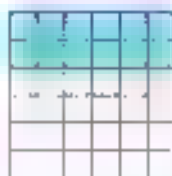
$$2 \times 4 = 8$$

So,  $4 \times 2 = 2 \times 4$

6



$$6 \times 2 = 12$$



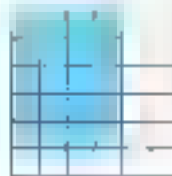
$$2 \times 6 = 12$$

So,  $6 \times 2 = 2 \times 6$

6



$$4 \times 5 = 20$$



$$5 \times 4 = 20$$

So,  $4 \times 5 = 5 \times 4$

## Activity

Complete the following:

Ⓐ  $5 \times 9 = 9 \times 5$

Ⓑ  $7 \times 2 = 2 \times 7$

Ⓒ  $6 \times 3 = 3 \times 6$

Ⓓ  $8 \times 3 = 3 \times 8$

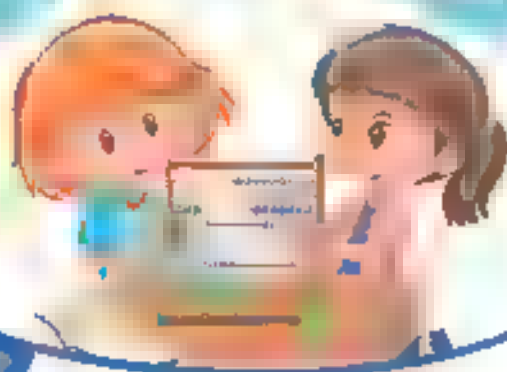
Ⓔ If  $3 + 3 + 3 + 3 + 3 + 3 + 3 = 21$  then  $7 \times 3 = 21$

And if  $7 + 7 + 7 = 21$  then  $3 \times 7 = 21$

So,  $7 \times 3 = 3 \times 7$

# Chapter 3

## Chapter Lessons



### Lessons 1&2 Word Problems and Applications on Multiplication

#### Objectives

- Explaining the variety of strategies to solve multiplication word problems
- Identifying elements of multiplication word problems
- Recognizing and identifying word problems as division problems
- Solving multiplication problems
- Identifying multiplication problems as word problems
- Using multiplication to solve problems that include a given quantity

### Lessons 6&7 Time Applications on Time

#### Objectives

- Help counting by fives
- Explaining the relationship between skip counting by 5 and adding time in 5-minute increments in a word problem
- Recognizing and solving time in 5-minute increments in word problems
- Recognizing and solving time in 10-minute increments in word problems
- Recognizing and solving time in 15-minute increments in word problems

### Lessons 3&4 Multiples

#### Objectives

- Explaining the relationship between multiplying by 2 and identifying common multiples of 2 and greater than 2
- Recognizing and identifying word problems as multiplication problems
- Identifying word problems as multiplication problems
- Identifying word problems as multiplication problems
- Identifying word problems as multiplication problems
- Identifying word problems as multiplication problems

### Lessons 8&9 Division Applications on Division

#### Objectives

- Explaining the relationship between dividing by 2 and identifying common multiples of 2 and greater than 2
- Recognizing and identifying word problems as division problems
- Recognizing and identifying word problems as division problems
- Recognizing and identifying word problems as division problems
- Recognizing and identifying word problems as division problems
- Recognizing and identifying word problems as division problems

### Lesson 5 Factors of a Number Using Arrays

#### Objectives

- Explaining the relationship between multiplication and division
- Recognizing and identifying word problems as multiplication problems
- Identifying word problems as multiplication problems

### Lesson 10 The Relation Between Multiplication and Division

#### Objectives

- Explaining the relationship between multiplication and division
- Recognizing and identifying word problems as multiplication problems
- Recognizing and identifying word problems as multiplication problems
- Recognizing and identifying word problems as multiplication problems

# Lessons

## 1&2

### مسائل كلامية وتطبيقات حياتية على الضرب

1&amp;2

#### Learn

solve for problems on multiplication, one of the following strategies followed as in the example

**Ex.**

Ahmed went to the market **4 times**, each time he bought **6 eggs**.  
How many eggs did Ahmed buy?



#### Using Repeated Addition Strategy

Number of eggs:  $6 + 6 + 6 + 6 = 24$  eggs



#### Using Skip Counting Strategy



Number of eggs: 24 eggs



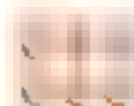
#### Using Array Strategy

Number of eggs:  $4 \times 6 = 24$  eggs

Number of eggs:  $6 \times 4 = 24$  eggs



#### Using the Equal Groups Strategy



Number of eggs:  $4 \times 6 = 24$  eggs



## Activity

Use the strategy you prefer to solve the following story problems.

### Work Space

- ③ Farha went to the store to buy rolls for a big family dinner. At the store, she bought 4 bags of rolls. Each bag contained 5 rolls. How many rolls did Farha buy?

$$4 \times 5 = 20 \text{ rolls}$$

- ③ Manal brought 6 bags of cookies to school. Each bag had 3 cookies in it. How many cookies were there altogether?

$$6 \times 3 = 18 \text{ cookies}$$

- ③ Matek runs 3 miles each day. How many miles does he run in 7 days?

$$7 \times 3 = 21 \text{ miles}$$

- ③ A bag of oranges contains 4 oranges. How many oranges are in 8 bags?

$$8 \times 4 = 32 \text{ oranges}$$

**Activity**

Match each story problem to its multiplication equation:

182

Mariam had 4 sweaters. Each sweater had 3 buttons on it.

- Ⓐ How many total buttons are there on all the sweaters?

$$4 \times 3 = 36 \quad \text{1}$$

Rana packed 6 boxes full of cans. Each box had 6 cans.

- Ⓑ How many total cans did Rana pack?

$$3 \times 7 = 21 \quad \text{2}$$

Amir hiked for 3 days over the summer.

- Ⓒ Each day he hiked 7 miles. How many miles did he hike in all?

$$4 \times 4 = 2 \quad \text{3}$$

**Activity**

Write a multiplication story for each multiplication sentence, then solve it.

Ⓐ  $5 \times 3$

(Any story that contains  $5 \times 3$  is accepted.)

A bag of oranges contains 3 oranges. How many oranges are there in 5 bags?

$$5 \times 3 = 15 \text{ oranges}$$

Ⓑ  $4 \times 6$

Each chair has four legs.

How many legs are there in 6 chairs?

$$6 \times 4 = 24 \text{ legs}$$

# Lessons 3&4

المضاعف

## Learn

### Multiplication by Zero

*Any number  $\times$  zero = zero*

**Ex.**

$$5 \times 0 = 0 + 0 + 0 + 0 + 0$$

$$6 \times 0 = 0$$

$$0 \times 10 = 0$$

$$9 \times 0 = 0$$

$$0 \times 18 = 0$$

### Multiplication by One

*Any number  $\times$  1 = the same number*

**Ex.**

$$5 \times 1 = 1 + 1 + 1 + 1 + 1$$

$$3 \times 1 = 3$$

$$1 \times 2 = 2$$

$$4 \times 1 = 4$$

$$1 \times 99 = 99$$

## Activity

Find the product

Ⓐ  $5 \times 0 = 0$

Ⓐ  $4 \times 1 = 4$

Ⓑ  $7 \times 0 = 0$

Ⓑ  $3 \times 1 = 3$

Ⓒ  $1 \times 8 = 8$

Ⓒ  $0 \times 9 = 0$

Ⓓ  $1 \times 15 = 15$

Ⓓ  $0 \times 12 = 0$

\_\_\_\_\_ is the product of this number multiplied by any integer. You can get multiples of a number by skipping the count by this number.

# Learn

## Multiples of 2 and 3

Use the 30 Chart to complete:

1	2	3	4	5	6	7	8	9	10
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

$$2 \times 0 = 0$$

$$2 \times 1 = 2$$

$$2 \times 2 = 4$$

$$2 \times 3 = 6$$

$$2 \times 4 = 8$$

$$2 \times 5 = 10$$

$$2 \times 6 = 12$$

$$2 \times 7 = 14$$

$$2 \times 8 = 16$$

$$2 \times 9 = 18$$

$$2 \times 10 = 20$$

$$2 \times 11 = 22$$

$$2 \times 12 = 24$$

$$3 \times 0 = 0$$

$$3 \times 1 = 3$$

$$3 \times 2 = 6$$

$$3 \times 3 = 9$$

$$3 \times 4 = 12$$

$$3 \times 5 = 15$$

$$3 \times 6 = 18$$

$$3 \times 7 = 21$$

$$3 \times 8 = 24$$

$$3 \times 9 = 27$$

$$3 \times 10 = 30$$

$$3 \times 11 = 33$$

$$3 \times 12 = 36$$

Key

Multiples of 2

Multiples of 3

Common Multiples

# Activity

Complete the following:

2	2	3	3	6	9	4	5
$\times 8$	$\times 5$	$\times 7$	$\times 9$	$\times 2$	$\times 2$	$\times 3$	$\times 3$
16	10	21	27	12	18	12	15

# Activity

Complete the following:

- $2 \times 6 = 12$
- $4 \times 3 = 12$
- $7 \times 3 = 21$
- $2 \times 9 = 18$
- $2 \times 7 = 14$
- $3 \times 3 = 9$
- $6 + 6 + 6 = 6 \times 3 = 18$
- $8 + 8 + 8 = 3 \times 8 = 24$
- $10 = 5 + 5 = 2 \times 5$
- $16 = 8 + 8 = 2 \times 8$





# Learn

## Multiples of 4 and 5

Use the 20 Chart to complete.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

④

$$\begin{aligned} 4 \times 0 &= 0 \\ 4 \times 1 &= 4 \\ 4 \times 2 &= 8 \\ 4 \times 3 &= 12 \\ 4 \times 4 &= 16 \\ 4 \times 5 &= 20 \\ 4 \times 6 &= 24 \\ 4 \times 7 &= 28 \\ 4 \times 8 &= 32 \\ 4 \times 9 &= 36 \\ 4 \times 10 &= 40 \\ 4 \times 11 &= 44 \\ 4 \times 12 &= 48 \end{aligned}$$

⑤

$$\begin{aligned} 5 \times 0 &= 0 \\ 5 \times 1 &= 5 \\ 5 \times 2 &= 10 \\ 5 \times 3 &= 15 \\ 5 \times 4 &= 20 \\ 5 \times 5 &= 25 \\ 5 \times 6 &= 30 \\ 5 \times 7 &= 35 \\ 5 \times 8 &= 40 \\ 5 \times 9 &= 45 \\ 5 \times 10 &= 50 \\ 5 \times 11 &= 55 \\ 5 \times 12 &= 60 \end{aligned}$$

Key.

Multiples of 4

Multiples of 5

Common Multiples

# Activity

Complete the following:

④ 5	⑤ 5	④ 4	⑤ 4	④ 6	⑤ 9	④ 4	⑤ 4
$\times 8$	$\times 5$	$\times 7$	$\times 9$	$\times 5$	$\times 5$	$\times 4$	$\times 5$
40	25	28	36	30	45	16	20

# Activity

Complete the following:

④ $5 \times 8 = 40$	⑤ $4 \times 10 = 40$	④ $8 \times 4 = 32$
④ $4 \times 6 = 24$	⑤ $5 \times 7 = 35$	⑤ $4 \times 9 = 36$
④ $5 + 5 = 2 \times 5 = 10$	⑤ $4 + 4 + 4 = 3 \times 4 = 12$	
④ $1 + 1 + 1 + 1 = 4 \times 1 = 4$	⑤ $8 + 8 + 8 = 4 \times 6 = 24$	
④ $30 = 10 + 10 + 10 = 3 \times 10$	⑤ $28 = 7 + 7 + 7 + 7 = 4 \times 7$	

# Learn

## Multiples of 6 and 7

Use the 20 Chart to complete

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

6

$$6 \times 0 = 0$$

$$6 \times 1 = 6$$

$$6 \times 2 = 12$$

$$6 \times 3 = 18$$

$$6 \times 4 = 24$$

$$6 \times 5 = 30$$

$$6 \times 6 = 36$$

$$6 \times 7 = 42$$

$$6 \times 8 = 48$$

$$6 \times 9 = 54$$

$$6 \times 10 = 60$$

$$6 \times 11 = 66$$

$$6 \times 12 = 72$$

7

$$7 \times 0 = 0$$

$$7 \times 1 = 7$$

$$7 \times 2 = 14$$

$$7 \times 3 = 21$$

$$7 \times 4 = 28$$

$$7 \times 5 = 35$$

$$7 \times 6 = 42$$

$$7 \times 7 = 49$$

$$7 \times 8 = 56$$

$$7 \times 9 = 63$$

$$7 \times 10 = 70$$

$$7 \times 11 = 77$$

$$7 \times 12 = 84$$

### Key

Multiples of 6

Multiples of 7

Common Multiples

## Activity

Complete the following:

① 7 ② 5 ③ 6 ④ 6 ⑤ 6 ⑥ 6 ⑦ 6 ⑧ 6 ⑨ 4

$\times 8$   $\times 7$   $\times 5$   $\times 9$   $\times 7$   $\times 4$   $\times 6$   $\times 6$

56 36 48 54 42 28 36 24

① 6 ② 7 ③ 6 ④ 7 ⑤ 5 ⑥ 3 ⑦ 6 ⑧ 7

$\div 2$   $\div 7$   $\div 3$   $\div 2$   $\div 6$   $\div 7$   $\div 2$   $\div 5$

12 49 18 14 30 21 12 35



### Activity

Complete in the same pattern:

Ⓐ	0	2	4	6	8	10	12	14	16	18	20
Ⓑ	0	4	8	12	16	20	24	28	32	36	40
Ⓒ	0	6	12	18	24	30	36	42	48	54	60
Ⓓ	0	7	14	21	28	35	42	49	56	63	70

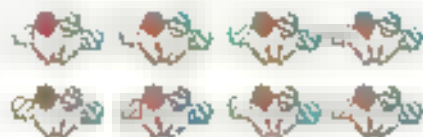
### Activity

Complete:

- Ⓐ  $7 + 7 + 7 + 7 = 4 \times 7 = 28$
- Ⓑ  $8 + 8 + 8 + 8 + 8 + 8 = 6 \times 8 = 48$
- Ⓒ  $8 \times 7 = 7 \times 8 = 56$
- Ⓓ  $9 + 9 + 9 + 9 = 6 \times 6 = 36$
- Ⓔ  $5 + 5 + 5 + 5 + 5 + 5 + 5 + 5 = 8 \times 5 = 40$

### Activity

Mr Sameh gave 4 lollipop to each of his 8 students. How many lollipops did Mr Sameh have at first?

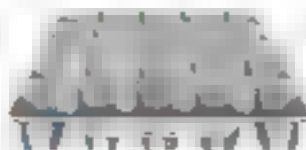


$$8 \times 4 = 32$$

### Activity

How many eggs are there in the opposite carton?

$$6 \times 5 = 30$$



# Learn

## Multiples of 8, 9 and 10

Use the Chart to complete:

1	2	3	4	5	6	7	8	9	10
10	20	30	40	50	60	70	80	90	100
11	22	33	44	55	66	77	88	99	110
12	24	36	48	60	72	84	96	108	120
13	26	39	52	65	78	91	104	117	130
14	28	42	56	70	84	98	112	126	140
15	30	45	60	75	90	105	120	135	150
16	32	48	64	80	96	112	128	144	160
17	34	51	68	85	102	119	136	153	170
18	36	54	72	90	108	126	144	162	180
19	38	57	76	95	114	133	152	171	190
20	40	60	80	100	120	140	160	180	200
21	42	63	84	105	126	147	168	189	210
22	44	66	88	110	132	154	176	198	220
23	46	69	92	116	139	161	184	207	230
24	48	72	96	120	144	168	192	216	240
25	50	75	100	125	150	175	200	225	250
26	52	78	104	130	156	182	208	234	260
27	54	81	108	135	162	189	216	243	270
28	56	84	112	140	168	196	224	252	280
29	58	87	116	145	174	203	232	261	290
30	60	90	120	150	180	210	240	270	300

8 × 0 = 0	9 × 0 = 0	10 × 0 = 0
8 × 1 = 8	9 × 1 = 9	10 × 1 = 10
8 × 2 = 16	9 × 2 = 18	10 × 2 = 20
8 × 3 = 24	9 × 3 = 27	10 × 3 = 30
8 × 4 = 32	9 × 4 = 36	10 × 4 = 40
8 × 5 = 40	9 × 5 = 45	10 × 5 = 50
8 × 6 = 48	9 × 6 = 54	10 × 6 = 60
8 × 7 = 56	9 × 7 = 63	10 × 7 = 70
8 × 8 = 64	9 × 8 = 72	10 × 8 = 80
8 × 9 = 72	9 × 9 = 81	10 × 9 = 90
8 × 10 = 80	9 × 10 = 90	10 × 10 = 100
8 × 11 = 88	9 × 11 = 99	10 × 11 = 110
8 × 12 = 96	9 × 12 = 108	10 × 12 = 120

Key:

Multiples of 8

Multiples of 9

Common Multiples

# Activity

Complete the following

8	2	12	2	18	2	25	2	30	2
×	2	×	6	×	6	×	5	×	4
	4		12		18		25		30
11	2	11	2	11	3	11	2	11	3
×	7	×	9	×	9	×	4	×	5
	14		18		27		8		15
12	4	12	10	12	3	12	4	12	3
×	5	×	7	×	10	×	4	×	7
	20		70		30		16		21

## Activity

Complete in the same pattern:

Ⓐ	30	27	24	21	18	15	12	9	6	3
Ⓑ	50	45	40	35	30	25	20	15	10	5
Ⓒ	70	63	56	49	42	35	28	21	14	7
Ⓓ	90	81	72	63	54	45	36	27	18	9

## Activity

- Ⓐ There are 9 apples in each box

How many apples are in 6 boxes?

$$6 \times 9 = 54$$



- Ⓑ Eman has 2 boxes of oranges

Each box contains 5 oranges

How many oranges does Eman have?

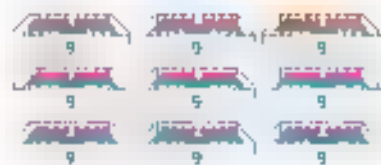
$$2 \times 5 = 10$$



- Ⓒ There are 9 erasers in each box.

How many erasers are in 9 boxes?

$$9 \times 9 = 81$$



## Activity

Complete the following:

- Ⓐ  $2 \times 10 = 20$       Ⓑ  $4 \times 0 = 0$       Ⓒ  $7 \times 10 = 70$   
 Ⓓ  $1 \times 9 = 9$       Ⓔ  $10 \times 4 = 40$       Ⓕ  $3 \times 3 = 9$   
 Ⓖ  $10 + 10 + 10 + 10 = 4 \times 10 = 40$   
 Ⓗ  $10 + 10 + 10 + 10 + 10 + 10 = 6 \times 10 = 60$   
 Ⓘ  $7 + 7 + 7 + 7 + 7 + 7 + 7 + 7 + 7 = 10 \times 7 = 70$



## Note:

- 1 All multiples of 2 have a ones digit (0, 2, 4, 6, or 8).

**Ex:** {2, 4, 6, 8, 10, 12, 14, 16, 18, 20, ...}

- 2 All multiples of the number (6) are common multiples of the number (2, 3).

**Ex:**

Multiples of 2: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20

Multiples of 3: 3, 6, 9, 12, 15, 18

Multiples of 6: 6, 12, 18, 24, ...

- 3 All multiples of 5 have a ones digit (0 or 5)

**Ex:** {5, 10, 15, 20, 25, 30, 35, ...}

- 4 All multiples of 10 have a ones digit (0)

**Ex:** {10, 20, 30, 40, 50, 60, ...}

# Lesson 5

## عوامل العدد باستخدام المصفوفات

### Learn

### Factors of a Number

Factors are the numbers that are multiplied to get a given number

**Ex** Find the factors of 12

$$1 \times 12 = 12$$

$$12 \times 1 = 12$$

$$2 \times 6 = 12$$

$$6 \times 2 = 12$$

$$3 \times 4 = 12$$

$$4 \times 3 = 12$$



So the number 12 can be arranged in different ways into arrays

$$12 = 1 \times 12$$

$$12 = 2 \times 6$$

$$12 = 3 \times 4$$

The factors of 12 are 1, 2, 3, 4, 6 and 12

The factors of a number are written without repetition.

**Ex.** Write the factor pairs of 16:

$$16 = 1 \times 16$$

$$16 = 2 \times 8$$

$$16 = 4 \times 4$$

$$16 = 8 \times 2$$

$$16 = 16 \times 1$$

So the factors of 16 are 1, 2, 4, 8 and 16

# Activity

Write the factor pairs and factors of each number.

a

6

$$1 \times 6 \quad 6 \times 1$$

$$2 \times 3 \quad 3 \times 2$$

Factors are 1 2 3 6

b

8

$$1 \times 8 \quad 8 \times 1$$

$$2 \times 4 \quad 4 \times 2$$

Factors are 1 2, 4, 8

c

18

$$1 \times 18 \quad 18 \times 1$$

$$2 \times 9 \quad 9 \times 2$$

$$3 \times 6 \quad 6 \times 3$$

Factors are 1 2 3 6 9 18

d

25

$$25 \times 1 \quad 1 \times 25$$

$$5 \times 5$$

Factors are 1 5 25

# Activity

Complete:

a The number 5 has 2 factor(s).

b The number 1 has 1 factor(s).

c The number 9 has 3 factor(s).

d 1 2 3 6 are the factors of number 6

# Activity

Match each number with its factors:

a

7

b

14

c

20

d

10

1, 2, 7, 14

1

1, 2, 5, 10

2

1, 7

3

1, 2, 4, 5, 10, 20

4



# Lessons 6&7

وقت - تطبيقات حياتية على الوقت

Day **24** Hour  
1 Day = 24 Hours

Hour **60** Minute  
1 Hour = 60 Minutes

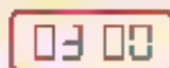
## Analog Clock

Minutes hand  
عصير الدقائق



Hours hand  
عصير الساعات

## Digital Clock



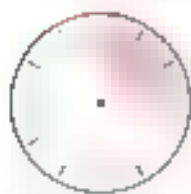
Hours  
الساعات

Minutes  
الدقائق

One hour = 60 minutes

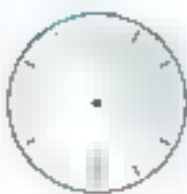
Two hours = 120 minutes

Quarter  $\frac{1}{4}$  hour



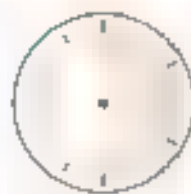
15 minutes

Third  $\frac{1}{3}$  hour



20 minutes

Half  $\frac{1}{2}$  hour

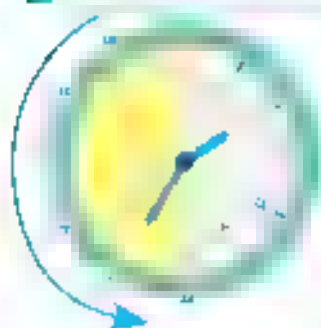


30 minutes

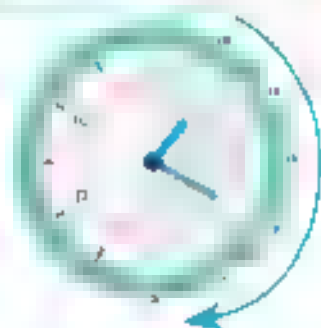
## How do we tell the time?

1

We look at the **minutes hand** and count by skipping 5 to the number where the **minutes hand** lands.



If the **minutes hand** is in the **left half**, we say "to 25 to



If the **minutes hand** is in the **right half**, we say "past 20 past

2

We look at the **hours hand** and write what it indicates. When the **hours hand** falls between two numbers,

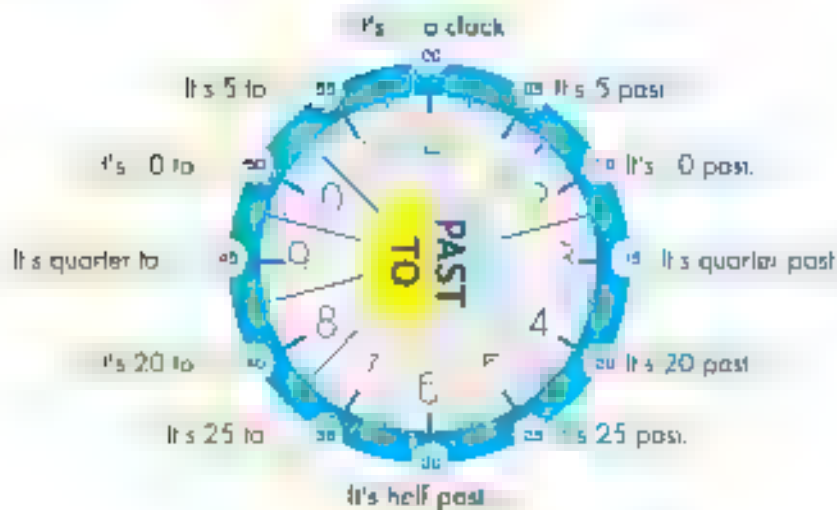


In the case of using **(to)**, we choose the **largest number** 25 to 2



In the case of using **(past)**, we choose the **smallest number** 20 past 1

# Chapter 3



It's 3 o'clock



It's 5 past 3



It's 10 past 3



It's quarter past 3



It's 20 past 3



It's 25 past 3



It's half past 3



It's 25 to 4



It's 20 to 4



It's quarter to 4



It's 10 to 4



It's 5 to 4

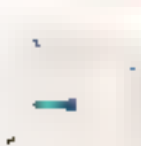


It's 4 o'clock

**Activity**

Write the time shown on the digital clock and in words

a



9 : 00

9 o'clock

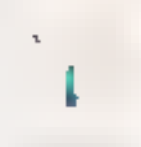
b



6 : 05

5 past 6

c



12 : 10

10 past 12

d



1 : 15

Quarter past 1

e



07:30

Half past 7

f



03:35

25 to 4

g



11:50

10 to 12

h



10:45

Quarter to 11

i



4 : 00

It's 4 o'clock

j



7 : 20

It's 20 past 7

k



5 : 10

It's 10 past 5.

l



12 : 35

It's 25 to 1



### Ex. To elapsed time

From 10:00 to 10:25

is 25 minutes.

From 12:00 to 12:04

is 4 hours.

### Activity

Calculate the elapsed time between the two clocks.

ⓐ



ⓑ

05:5

08:5

Elapsed time. 2 hours

Elapsed time 3 hours

### Activity

Draw the time on each clock.

After

10 minutes



Before

2 hours



After

10 minutes



3:00

3:10

1:10

1:20

### Activity

Reham started studying at 4:00 and when she finished it was 4:40. How many minutes did Reham take to study?

40 minutes

### Activity

You leave school at 4:00 and when you get home the clock is as the opposite figure:

How many minutes did it take you to walk home?

20 minutes

### Activity

If it takes you 45 minutes to walk home from school and you leave at 3:00. What time will it be when you get home?

Draw the time on the clock.

Quarter to 4 03:45

# Lessons

## 8&9

### مفهوم القسمة - تطبيقات حيانية على القسمة

8&amp;9

Division is the distribution of a number of things into equal groups.

القسمة هي توزيع عدد أو أشياء بالتساوي.

**Ex.**

There are 12 apples that need to be divided equally between 3 baskets

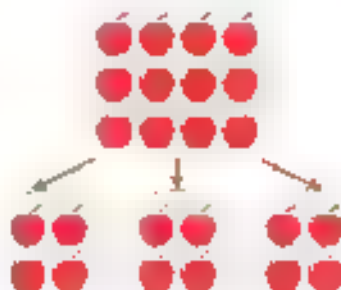
Draw a part-part-whole model to show the answer

To divide the apples

We draw 3 circles

Draw one apple in each circle

Repeat the same step as before until all the apples are distributed



**Each basket will contain 4 apples**

The following model is called a part-part-whole



**We can express the division process as follows**

12



=

4

Dividend  
المقسوم

Divided by  
على (بدر القسمة)

Divisor  
المقسوم عليه

Quotient  
ناتج القسمة

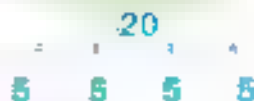


## Activity

Answer the following

- ① There are 20 fish that need to be placed equally in 4 bowls. How many fish should be put in each bowl?

Draw a part-part-whole model to show your answer.



Hint

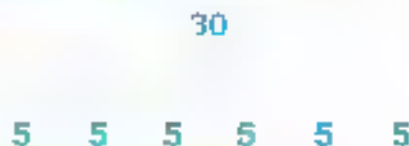
- Circle each 4 dots together
- Count the groups

$$20 \div 4 = 5$$

- ② The teacher has 30 crayons to be shared equally between 6 students.

What is the share of each?

Draw a part-part-whole model to show your answer.

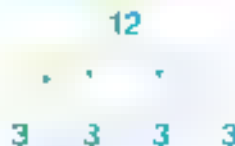


$$30 \div 6 = 5$$

- ③ Each cat needs 3 fish for lunch.

How many cats will we feed if we have 12 fish?

Draw a part-part-whole model to show your answer.



$$12 \div 3 = 4$$

## Activity

Divide

- |                   |                   |                   |
|-------------------|-------------------|-------------------|
| ① $25 \div 5 = 5$ | ② $32 \div 4 = 8$ | ③ $45 \div 7 = 5$ |
| ④ $18 \div 3 = 6$ | ⑤ $27 \div 3 = 9$ | ⑥ $45 \div 9 = 5$ |
| ⑦ $48 \div 8 = 6$ | ⑧ $49 \div 7 = 7$ | ⑨ $54 \div 6 = 9$ |

# Lesson

## 10

علاقة بين النضرب والقسمة

10

If  $3 \times 6 = 18$ , then

$$18 \div 3 = 6$$

$$18 \div 6 = 3$$

### Multiplication & Division Fact Families

Ex.

$$3 \times 6 = 18$$

18

$$6 \times 3 = 18$$

$$18 \div 3 = 6$$

18

$$18 \div 6 = 3$$

3

6

x

3

=

6

### Activity

Find the missing factor in the triangles, then write the four equations to complete the fact family.

○

78

○

32

○

42

4

$$7 \times 4 = 28$$

$$4 \times 7 = 28$$

$$28 \div 4 = 7$$

$$28 \div 7 = 4$$

8

4

$$8 \times 4 = 32$$

$$4 \times 8 = 32$$

$$32 \div 4 = 8$$

$$32 \div 8 = 4$$

6

7

$$6 \times 7 = 42$$

$$7 \times 6 = 42$$

$$42 \div 6 = 7$$

$$42 \div 7 = 6$$





## Learn

### Different Forms for Division

$$24 \div 3 = 8$$

Dividend

Divisor

Quotient

Quotient

$$3 \overline{) 24} \rightarrow \text{Dividend} \div \frac{24}{3} = 8$$

Divisor

## Activity

Divide:

Ⓐ  $\frac{10}{2} = 5$

Ⓑ  $\frac{30}{5} = 6$

Ⓒ  $\frac{8}{4} = 2$

Ⓓ  $\frac{32}{8} = 4$

Ⓔ  $\frac{9}{3} = 3$

Ⓕ  $\frac{42}{6} = 7$

Ⓗ  $\frac{64}{8} = 8$

Ⓖ  $\frac{72}{8} = 9$

Ⓖ  $\frac{45}{9} = 5$

## Activity

Divide:

Ⓐ  $4 \overline{) 12}$   
9

Ⓑ  $2 \overline{) 6}$   
5

Ⓒ  $3 \overline{) 21}$   
4

Ⓓ  $7 \overline{) 63}$   
8

Ⓔ  $3 \overline{) 15}$   
10

Ⓕ  $9 \overline{) 36}$   
1

Ⓗ  $6 \overline{) 48}$

Ⓖ  $7 \overline{) 70}$

Ⓖ  $5 \overline{) 5}$



$$35 \div 5 = 7$$

35÷7



$$36 \div 4 = 9$$

9x4

**Activity**

Complete:

Ⓐ  $12 \div 3 = 4$

Ⓐ  $10 \div 2 = 5$

Ⓐ  $21 \div 7 = 3$

Ⓑ  $45 \div 5 = 9$

Ⓑ  $42 \div 7 = 6$

Ⓑ  $80 \div 8 = 10$

Ⓒ  $27 \div 3 = 9$

Ⓒ  $15 \div 3 = 5$

Ⓒ  $16 \div 2 = 8$

Ⓓ  $36 \div 9 = 4$

Ⓓ  $18 \div 9 = 2$

Ⓓ  $48 \div 8 = 6$

**Learn**

The array can be expressed using  
a multiplication problem or a division problem.

*Multiplication*

$3 \times 4 = 12$

Or

$4 \times 3 = 12$

*Division*

$12 \div 3 = 4$

Or

$12 \div 4 = 3$

**Activity**

Express each of the following arrays using one multiplication problem  
and one division problem.

Ⓐ



$3 \times 5 = 15$

$15 \div 5 = 3$

Ⓑ



$3 \times 6 = 18$

$18 \div 6 = 3$

# Chapter

# 4



## Lesson 1

### Polygons

#### Objectives

- Identifying the attributes of two-dimensional shapes
- Defining attributes based on attributes
- Sort Two-dimensional Shapes based on their attributes
- Identifying rectangle and parallelogram

## Lesson 2

### Properties of Quadrilaterals

#### Objectives

- Applying rules to sort quadrilaterals
- Constructing quadrilaterals to create a picture
- Drawing a bar graph representing quadrilaterals to create a picture

## Lesson 3

### Area

#### Objectives

- Determining the area of rectangles using strategies related to multiplication

## Lessons 4&5

### Rectangles with Equal Area - Area Using Models

#### Objectives

- Creating and describing multiple rectangles with the same area
- Explain and compare the Commutative Property of Multiplication
- Defining area in their own words
- Applying strategies to measure area

## Lessons 6&7

### Area by Splitting Arrays - Distributive Property on Multiplication

#### Objectives

- Dividing arrays into smaller arrays to solve multiplication problems
- Explaining why dividing arrays make it easier to solve multiplication problems
- Modeling Distributive Property of Multiplication using arrays
- Applying the Distributive Property to solve multiplication problems
- Explaining the Distributive Property of Multiplication

## Polygons

المضلعات

## Polygon

It is a closed shape formed from 3 line segments (**sides**) or more.

يُشكّل مضلع ذو 3 أضلاع من 3 قطع مستقيمة أو أكثر

## Polygons



Angle

Sina

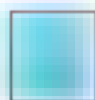
Vertex

In any polygon,

the number of sides = the number of vertices

## Activity

Color only the polygons



Line Segment

قطعة مستقيمة

Polygon

مضلع

Angle

زاوية

Vertex

رأس

Side


ضلع



## Two-dimensional Shapes (2D-shapes) الأشكال ثنائية الأبعاد

3 Sides      4 Sides      5 Sides      6 Sides      7 Sides      8 Sides

Triangle      Quadrilateral      Pentagon      Hexagon      Heptagon      Octagon

Shape	Name	Attributes		
		Sides	Vertices	Angles
	Circle	0	0	0
	Triangle	3	3	3
	Quadrilateral	4	4	4
	Pentagon	5	5	5
	Hexagon	6	6	6
	Heptagon	7	7	7
	Octagon	8	8	8

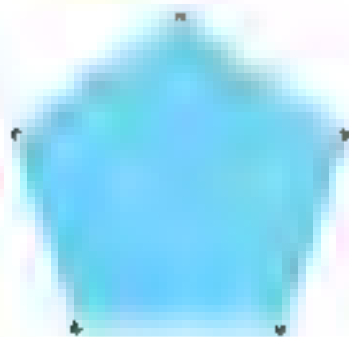
**Activity**

Color the quadrilateral shapes (4 sides):

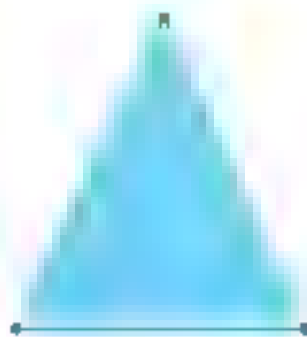
**Activity**

Draw:

A shape with 5 sides

The shape's name **Pentagon**

A shape with 3 sides

The shape's name **Triangle****Activity**

Complete the following sentences.

- The triangle has **3** sides, **3** angles, and **3** vertices.
- The **pentagon** has **5** sides but the **hexagon** has **6** sides.
- The octagon has **8** angles but the **heptagon** has **7** sides.
- The **quadrilateral** is a polygon that has **4** sides.

## Properties of Quadrilaterals

خواص الأشكال الرباعية

## Learn

## Parallel Lines المتوازية

Parallel lines can go on forever  
and never intersect

## Ex. of parallel lines:



The opposite edges of a Tv



The opposite edges of the wooden ladder

## Angles



Acute angle



Right angle


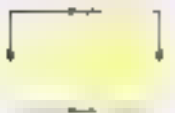
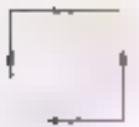





Obtuse angle

## Quadrilateral

It is a polygon that has 4 sides, 4 vertices and 4 angles.



Quadrilateral	Name	Attributes	
		Sides	Angles
	Parallelogram	Each two opposite sides are equal and parallel.	Each two opposite angles are equal.
	Rectangle	Each two opposite sides are equal and parallel.	All angles are equal. Each angle is right angle.
	Square	Each two opposite sides are parallel. All sides are equal.	All angles are equal. Each angle is right angle.
	Rhombus	Each two opposite sides are parallel. All sides are equal.	Each two opposite angles are equal.
	Trapezium Trapezoid	Only one pair of opposite sides is parallel.	
	Kite	Two pairs of adjacent sides are equal.	One pair of opposite angles is equal.

Pair  
Attributes

زوج  
متصلاتی  
Opposite  
Adjacent

مقابلین  
متجاورین



# Activity

Match each quadrilateral to its name:

- ☐ a Kite    
 ☐ b Parallelogram    
 ☐ c Trapezoid    
 ☐ d Rectangle    
 ☐ e Square    
 ☐ f Rhombus

1

2

3

4

5

6

# Activity

Match each quadrilateral with a compatible property

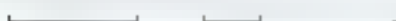
- ☐ a Each two opposite sides are equal



- ☐ b Each two opposite angles are equal



- ☐ c All sides are equal in length.



# Activity

Complete the following sentences

- a All sides are equal in **square** and **rhombus**  
 b All angles are equal in **rectangle** and **square**  
 c A **trapezoid** has only one pair of **parallel opposite** sides  
 d A **kite** has two pairs of equal adjacent sides and one pair of **equal opposite** angles.

## Area

## Learn

## Area

It is the number of square units in which the shape is formed.

المساحة هي عدد الوحدات المربعة التي يتكون منها الشكل.

To find the area of a rectangle, we follow one of the following strategies.

## ► Array Strategy:

Area = Number of rows  $\times$  Number of columns

Ex.

$$\begin{aligned}\text{Area} &= 4 \times 6 \\ &= 24 \text{ square units}\end{aligned}$$

► Length  $\times$  Width Strategy:

Area = Length  $\times$  Width

Ex.

$$\begin{aligned}\text{Area} &= 6 \times 4 \\ &= 24 \text{ square units}\end{aligned}$$



Square units  
Width

وحدات مربعة  
العرض  
Area  
length

مساحة  
الطول

## Activity

Find the area of each shape

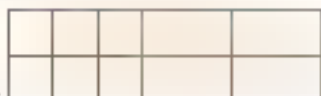


Number of rows = 3 rows  
 Number of columns = 7 columns  
 Area = 3 × 7  
 = 21 square units



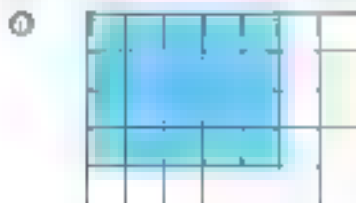
Number of rows = 4 rows  
 Number of columns = 7 columns  
 Area = 4 × 7  
 = 28 square units

c Length = 7 units  
 Width = 2 units  
 Area = 7 × 2 = 14 square units

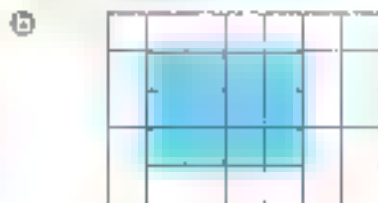


## Activity

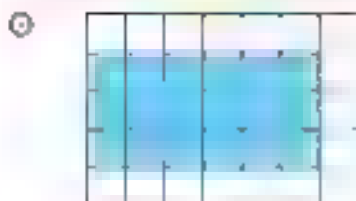
Use the grid to draw a rectangle representing each of the following multiplication sentences. Then calculate the area:



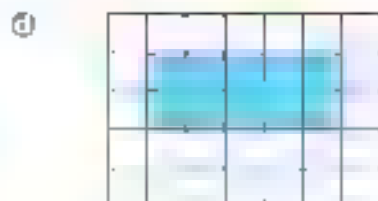
$$4 \times 5 = 20 \quad \square$$



$$3 \times 4 = 12 \quad \square$$



$$6 \times 3 = 18 \quad \square$$



$$2 \times 5 = 10 \quad \square$$

## Rectangles with Equal Area – Area Using Models

مستطيلات متساوية المساحة – المساحة باستخدام النماذج

4&amp;5



## Notes:

- More than one rectangle can be created with the same area.

يمكن إنشاء أكثر من مستطيل له نفس المساحة

**Ex.** You can draw more than one rectangle with an area of 8 square units each:



$$\text{Area} = 4 \times 2 = 8 \text{ square units}$$



$$\text{Area} = 2 \times 4 = 8 \text{ square units}$$



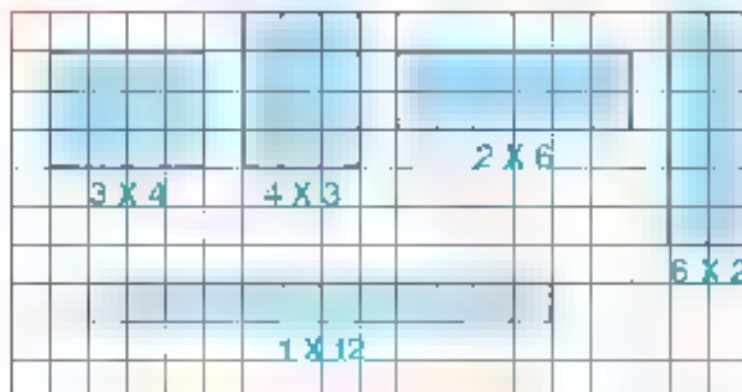
$$\text{Area} = 1 \times 8 = 8 \text{ square units}$$



$$\text{Area} = 8 \times 1 = 8 \text{ square units}$$

## Activity

Draw on the grid as many rectangles as you can get from the same area, which is 12 square units.



# Activity

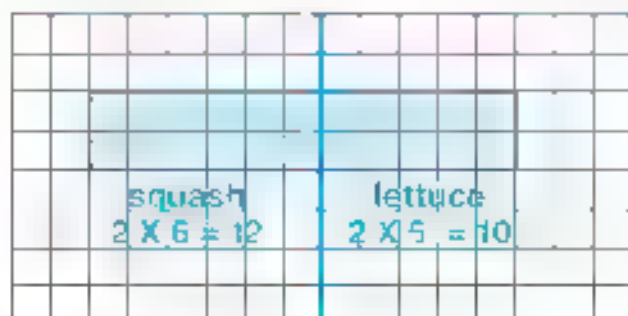
Haba has two rectangular gardens, one for lettuce and one for squash. The squash takes up 12 square units and the lettuce takes up 10 square units. What would her gardens look like?

Remember, the gardens are rectangles with the same number of square units in each row.

Draw the gardens below. They must fit on the grid paper.

$$12 = 2 \times 6$$

$$10 = 2 \times 5$$



# Activity

On the grid below, draw and label as many rectangles as you can with the given area. Then, write equations that match your rectangles.

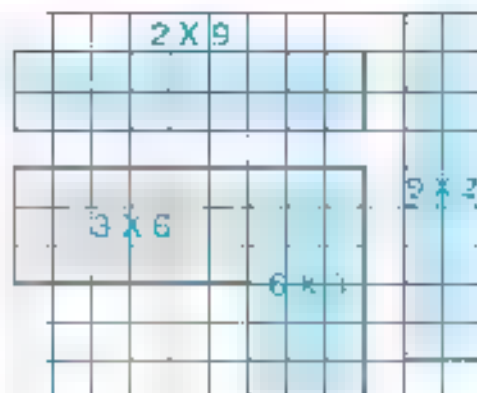
18 square units.

$$18 = 2 \times 9$$

$$18 = 9 \times 2$$

$$18 = 3 \times 6$$

$$18 = 6 \times 3$$



## Area of the Rectangle

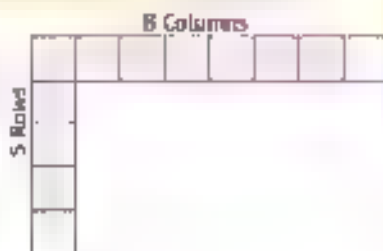
The area of a rectangle or square can be calculated by multiplying its dimensions (length and width).

The dimensions of the opposite figure are 5 units (5 rows) and 8 units (8 columns).

Area of the rectangle

$$= 5 \times 8$$

$$= 40 \text{ square units}$$



### Activity

Find the area of each shape.

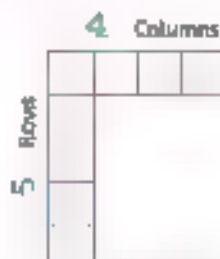
①



$$\text{Area} = 3 \times 6$$

$$= 18 \text{ units}$$

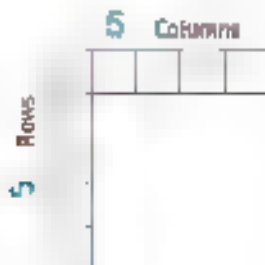
②



$$\text{Area} = 5 \times 4$$

$$= 20 \text{ units}$$

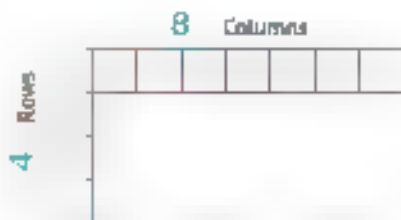
③



$$\text{Area} = 5 \times 5$$

$$= 25 \text{ units}$$

④



$$\text{Area} = 4 \times 8$$

$$= 32 \text{ units}$$

6&7

## Area by Splitting Arrays - Distributive Property on Multiplication

المساحة بتقسيم المصفوفات - خاصية التوزيع في ضرب

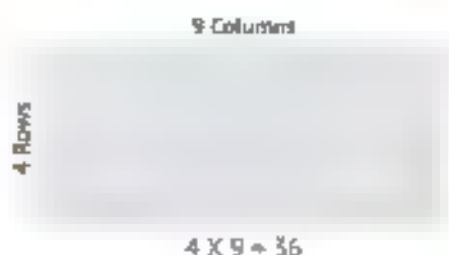
### Learn

When dividing the array into two parts,  
we notice that the sum of their products is equal to the  
product of the original array.

عند تقسيم مصفوفة ، نلاحظ ، مجموع حاصل ضربها يساوي حاصل ضرب المصفوفة الأصلية

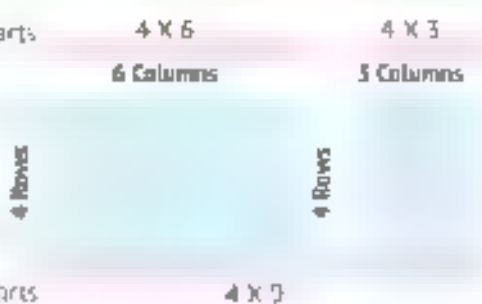
In the opposite array;

Number of rows = 4  
Number columns = 9  
Area =  $4 \times 9 = 36$



In the following figure:

We divided the array into two parts  
Area of the first part  
 $= 4 \times 6 = 24$   
Area of the other part  
 $= 4 \times 3 = 12$



By adding the area of the two parts  
Total area =  $24 + 12 = 36$

From above  $4 \times 9 = (4 \times 6) + (4 \times 3)$   
 $36 = 24 + 12$  (Distributive Property)

Therefore,  $4 \times 9 = 4 \times (6 + 3) = (4 \times 6) + (4 \times 3)$

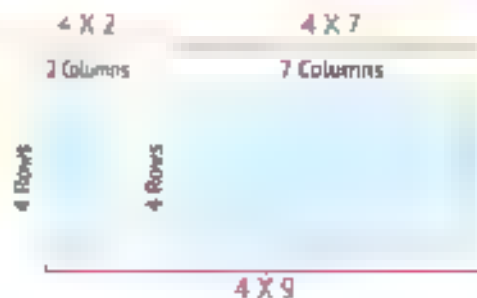
# Area by Splitting Arrays Distributive Property on Multiplication

- We can divide the array into two ways to evaluate

$$4 \times 9 = (4 \times 2) + (4 \times 7)$$

Therefore

$$\begin{aligned} 4 \times 9 &= 4 \times (2 + 7) \\ &= (4 \times 2) + (4 \times 7) \\ &= 8 + 28 = 36 \end{aligned}$$



$$4 \times 9 = (4 \times 5) + (4 \times 4)$$

Therefore

$$\begin{aligned} 4 \times 9 &= 4 \times (5 + 4) \\ &= (4 \times 5) + (4 \times 4) \\ &= 20 + 16 = 36 \end{aligned}$$



## Activity

Complete using the Distributive Property

①  $5 \times 8 =$  **40**

②  $3 \times 7 =$  **21**

$$\begin{aligned} & (5 \times 3) + (5 \times 5) \\ &= 15 + 25 = 40 \end{aligned}$$

$$\begin{aligned} & 3 \times 4 + 3 \times 3 \\ &= 12 + 9 = 21 \end{aligned}$$

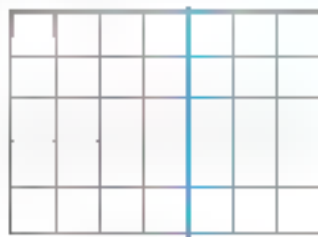




## Activity

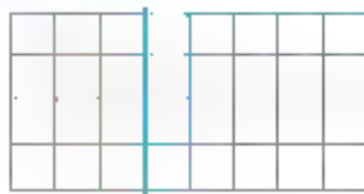
Divide the following arrays according to the Distributive Property:

A



$$5 \times 7 = (5 \times 4) + (5 \times 3)$$

B



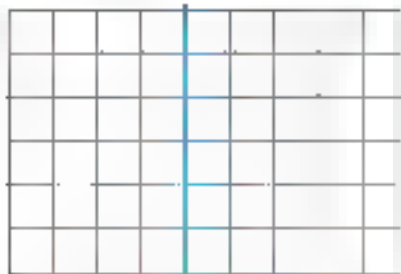
$$4 \times 8 = (4 \times 5) + (4 \times 3)$$

## Activity

Divide the following arrays, then use the Distributive Property

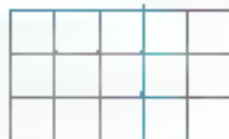
بوجود اجزاء مساوی

A



$$\begin{aligned} &6 \times 7 = 6 \times 4 + 6 \times 3 \\ &= 24 + 18 = 42 \end{aligned}$$

B



$$\begin{aligned} &3 \times 5 = 3 \times 3 + 3 \times 2 \\ &= 9 + 6 = 15 \end{aligned}$$

# Activity

Complete.

$$\textcircled{a} 7 \times 9 = (7 \times 3) + (7 \times \underline{6})$$

$$\textcircled{b} 5 \times 8 = (\underline{5} \times 3) + (\underline{5} \times 5)$$

$$\textcircled{c} 8 \times \underline{4} = (8 \times 3) + (8 \times 2)$$

$$\textcircled{d} \underline{3} \times 6 = (3 \times 3) + (3 \times 3)$$

$$\textcircled{e} \underline{4} \times 8 = (\underline{4} \times 5) + (4 \times 3)$$

# Activity

Complete as in the example:

$$\begin{aligned} \text{Ex. } 5 \times 12 &= 5 \times (10 + 2) = 5 \times 10 + 5 \times 2 \\ &= 50 + 10 = 60 \end{aligned}$$

$$\begin{aligned} \textcircled{a} 7 \times 13 &= 7 \times (10 + 3) = 7 \times 10 + 7 \times 3 \\ &= 70 + 21 = 91 \end{aligned}$$

$$\begin{aligned} \textcircled{b} 6 \times 15 &= 6 \times (10 + 5) = 6 \times 10 + 6 \times 5 \\ &= 60 + 30 = 90 \end{aligned}$$

$$\begin{aligned} \textcircled{c} 3 \times 18 &= 3 \times (10 + 8) = 3 \times 10 + 3 \times 8 \\ &= 30 + 24 = 54 \end{aligned}$$

# Activity

Complete as in the example:

$$\text{Ex. } 3 \times 7 + 3 \times 5 = 3 \times \underline{12} = 36$$

$$\textcircled{a} (7 \times 4) + (7 \times 6) = 7 \times \underline{10} = 70$$

$$\textcircled{b} (\underline{6} \times 3) + (\underline{6} \times 2) = 6 \times \underline{5} = 30$$

$$\textcircled{c} (4 \times 9) + (6 \times 9) = \underline{10} \times 9 = 90$$

# Chapter

# 5

## Lesson 1 Perimeter of Polygons

- Measuring the polygon's side lengths in units
- Drawing polygons
- Calculating the perimeter of polygons in units
- Explaining why perimeter is a real measurement
- Distinguishing between polygons and their perimeters

## Lesson 2–4 Perimeter and Area: Area Using the Dimensions Area Using Different Strategies

- Explaining the difference between perimeter and area
- Calculating the perimeter and area of given arrays with some units measure
- Explaining why area is not a linear measurement
- Calculating the area of a rectangle given its dimensions and units
- Describing how multiplication strategies are used to solve area problems
- Applying a variety of strategies to solve area problems
- Explaining the strategies they used to solve area problems

## Lesson 5&6 Different Perimeters for the Same Area Different Areas for the Same Perimeter

- Drawing rectangles
- Drawing different rectangles with the same area
- Calculating the perimeter of rectangles with the same area but different dimensions
- Drawing different rectangles with the same perimeter
- Calculating the area of rectangles with the same perimeter but different dimensions

## Lesson 7 Applications on Perimeter and Area

- Calculating
- Applying perimeter and area to real-world problems
- Applying their understanding of area to determine real-world problems

## Lesson 8 Multiplying by Multiples of 10

- Calculating
- Multiplying by 10 and multiples of 10
- Identifying and explaining patterns observed when multiplying by 10s

## Lesson

## Perimeter of Polygons

## محيط المضلعات

## Learn

The **perimeter** of any shape is the length of the **outer line** that surrounds the shape.

المحيط لأي شكل هندسي هو طول الخط الخارجي الذي يحيط به الشكل.

If the figure is drawn on the square grid, we **count** the **outer line units** surrounding the figure.

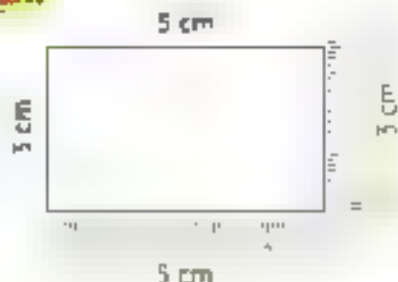
If the figure is drawn on white paper we **measure** the lengths of its sides using a ruler and **add these lengths together**.

Ex.



Perimeter = 16 length units

Ex.



Perimeter =  $5 + 3 + 5 + 3 = 16$  cm

## Activity

Find the perimeter of each figure:

a



Perimeter

$$= 4 + 7 + 4 + 7$$

$$= 22 \text{ length units}$$

b



Perimeter

$$= 5 + 5 + 5 + 5$$

$$= 20 \text{ length units}$$



## The Perimeter of any Polygon

The perimeter of any polygon equals the **sum** of its side lengths

$$\blacksquare \text{ Perimeter} = 5 + 4 + 2 + 3 + 2 = 16 \text{ cm}$$



## Activity

Use a ruler to measure the length of each side of the following shapes, then find the perimeter



Perimeter

$$\begin{aligned} &= 4 + 2 + 4 + 2 \\ &= 12 \text{ cm} \end{aligned}$$



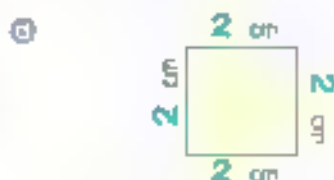
Perimeter

$$\begin{aligned} &= 5 + 2 + 2 + 2 + 2 \\ &= 11 \text{ cm} \end{aligned}$$



Perimeter

$$\begin{aligned} &= 4 + 2 + 4 + 2 \\ &= 12 \text{ cm} \end{aligned}$$



Perimeter

$$\begin{aligned} &= 2 + 2 + 2 + 2 \\ &= 8 \text{ cm} \end{aligned}$$

## Lessons

Perimeter and Area - Area Using the Dimensions Area Using Different Strategies

المحيط والمساحة المساحة باستخدام الأبعاد المساحة باستخدام استراتيجيات مختلفة

24



- **Perimeter** is the length of the lines that surround the figure from the outside.
- **Area** is how many units of space the shape contains from the inside.

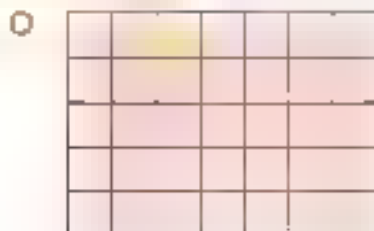
Perimeter = 22 length units

Area = 28 square units



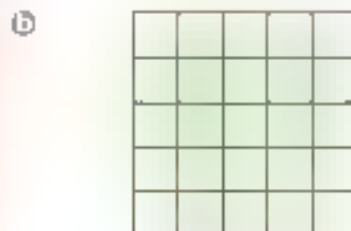
## Activity

Find the area and perimeter of each of the following.



$$\begin{aligned} \text{Area} &= 5 \times 7 \\ &= 35 \text{ square units} \end{aligned}$$

$$\begin{aligned} \text{Perimeter} &= 5 + 7 + 5 + 7 \\ &= 24 \text{ length units} \end{aligned}$$



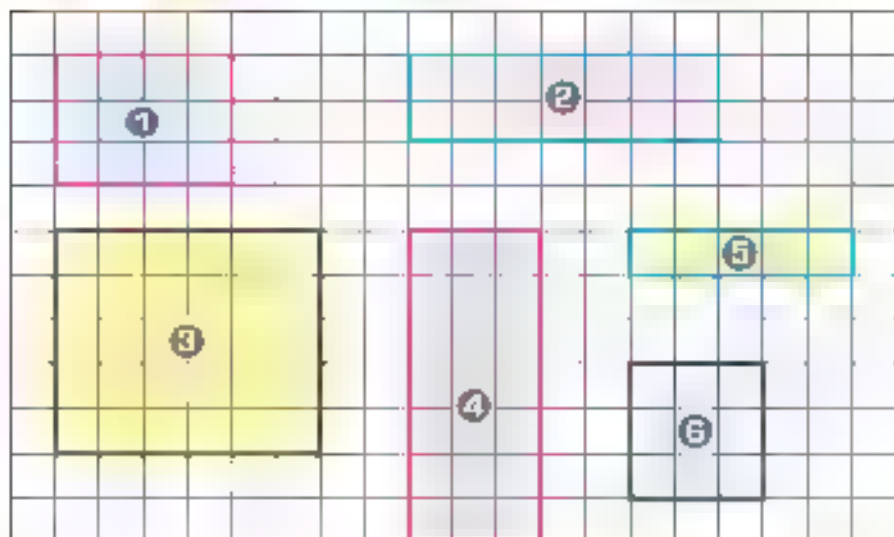
$$\begin{aligned} \text{Area} &= 5 \times 5 \\ &= 25 \text{ square units} \end{aligned}$$

$$\begin{aligned} \text{Perimeter} &= 5 + 5 + 5 + 5 \\ &= 20 \text{ length units} \end{aligned}$$



## Activity

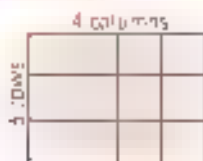
Look to the following grid then complete the table.



Shape	Perimeter	Area
1	$3 + 4 + 3 + 4 = 14$ length units	$3 \times 4 = 12$ square units
2	$2 + 7 + 2 + 7 = 18$ length units	$2 \times 7 = 14$ square units
3	$5 + 6 + 5 + 5 = 22$ length units	$5 \times 6 = 30$ square units
4	$7 + 3 + 7 + 3 = 20$ length units	$7 \times 3 = 21$ square units
5	$1 + 5 + 1 + 5 = 12$ length units	$1 \times 5 = 5$ square units
6	$3 + 3 + 3 + 3 = 12$ length units	$3 \times 3 = 9$ square units

## Strategies for finding the area of a rectangle and square

### 1 Array Strategy



3 rows, 4 units each

$$\text{Area} = 4 + 4 + 4 = 12 \text{ square units} \quad \text{Area} = 3 + 3 + 3 = 9 \text{ square units}$$

$$(3 \times 4) \quad (3 \times 3)$$



3 rows, 3 units each



length = 4 units, Width = 3 units

Area = length  $\times$  Width

$$= 4 \times 3 = 12 \text{ square units}$$



length = 3 units, Width = 3 units

Area = length  $\times$  Width

$$= 3 \times 3 = 9 \text{ square units}$$

### 2 Distribution Strategy



$$\text{Area} = 3 \times 4 = (3 \times 2) + (3 \times 2) \quad \text{Area} = 3 \times 3 = (3 \times 2) + (3 \times 1)$$

$$= 6 + 6 \quad = 6 + 3$$

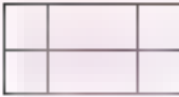


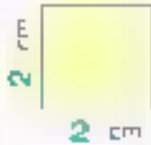
$$= 12 \text{ square units} \quad = 9 \text{ square units}$$





## Activity

Find the area of each shape using two different strategies

Shape	First Strategy	Second Strategy
	<p>2 Rows of 4</p> $4 + 4 = 8$	$4 \times 2 = 8$
Area = 8 square units	Area = 8 square units	
	$4 \times 4 = 16$	$4 + 4 + 4 + 4 = 16$
Area = 16 square units	Area = 16 square units	
	$4 \times 2 = 8$	$2 + 2 + 2 + 2 = 8$
Area = 8 square cm	Area = 8 square cm	
	$2 \times 2 = 4$	$2 + 2 = 4$
Area = 4 square cm	Area = 4 square cm	

# Activity

- ① Find the area of each of the following rectangles:

1

7 m

4 m

$$\begin{aligned} \text{Area} &= 7 \times 4 \\ &= 28 \text{ square meters} \end{aligned}$$

2

9 m

5 m

$$\begin{aligned} \text{Area} &= 9 \times 5 \\ &= 45 \text{ square meters} \end{aligned}$$

- ② Ahmed wants to build a 30 square meter goat farm. Find the area of the following two pieces of land, then decide which one is suitable for building the farm.

8 m

5 m

3 m

6 m

- 1 Area of the first piece =  $8 \times 5 = 40$  square meters
- 2 Area of the second piece =  $6 \times 3 = 18$  square meters
- 3 The suitable piece for building farm is **First**



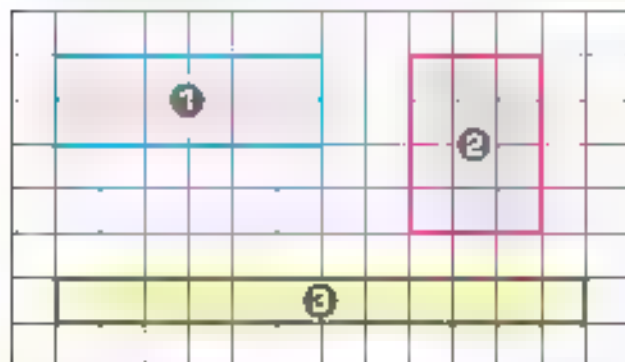
## Chapter 5

### Lessons

#### Different Perimeters for the Same Area - Different Areas for the Same Perimeter

مخططات مختلفة بنفس المساحة مخططات مختلفة بنفس المحيط

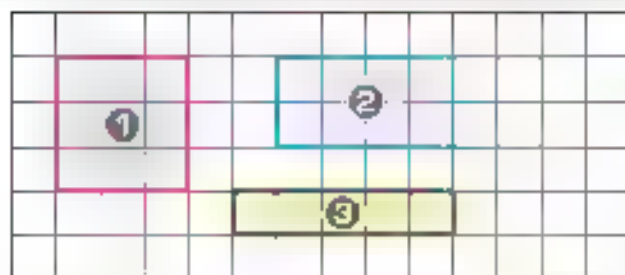
The following grid shows a number of rectangles



Rectangle	1	2	3
Area	12 sq. units	12 sq. units	12 sq. units
Perimeter	16 length units	14 length units	26 length units



- Rectangles with the same area, do not necessarily have the same perimeter
- The same area of two rectangles means that the two dimensions have the same product.



Rectangle	1	2	3
Area	9 sq. units	12 sq. units	4 sq. units
Perimeter	12 length units	12 length units	12 length units



- Rectangles with the same perimeter, do not necessarily have the same area.
- The same perimeter of two rectangles means that the two dimensions have the same sum



# Activity

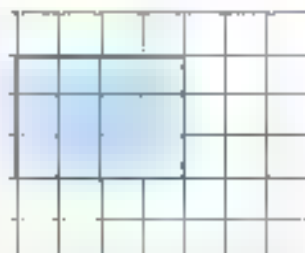
Draw a rectangle with the same area as the given rectangle, but with a different perimeter.

Ⓐ



Area = 12 square units

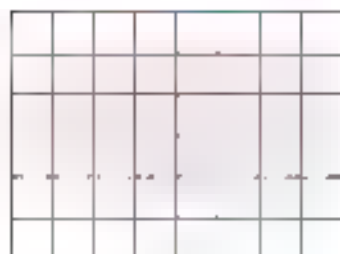
Perimeter = 16 length units



Area = 12 square units

Perimeter = 14 length units

Ⓑ



Area = 24 square units

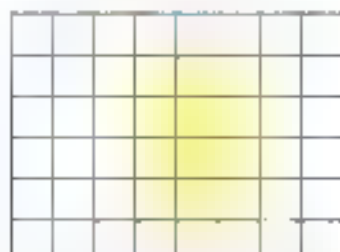
Perimeter = 22 length units



Area = 24 square units

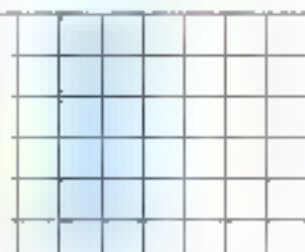
Perimeter = 20 length units

Ⓒ



Area = 12 square units

Perimeter = 14 length units



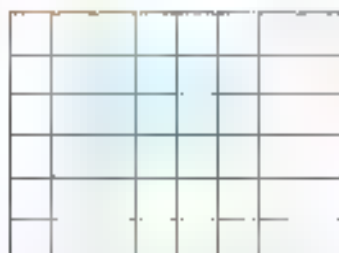
Area = 12 square units

Perimeter = 16 length units

# Activity

Draw a rectangle with the same perimeter as the given rectangle, but with different area:

Ⓐ



Area = 15 square units

Perimeter = 16 length units



Area = 16 square units

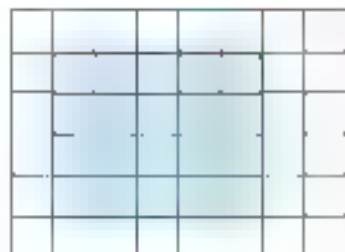
Perimeter = 16 length units

Ⓑ



Area = 18 square units

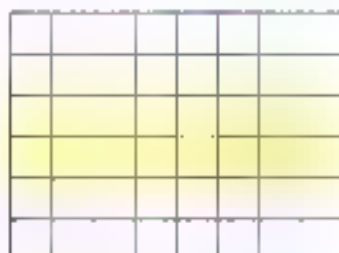
Perimeter = 18 length units



Area = 20 square units

Perimeter = 18 length units

Ⓒ



Area = 20 square units

Perimeter = 18 length units



Area = 24 square units

Perimeter = 20 length units

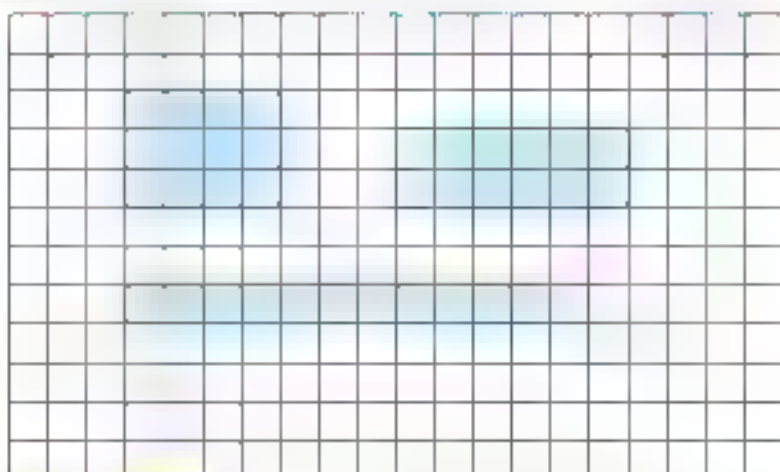
## Activity

Draw 3 different rectangles with an area of 12 square units

$$12 = 12 \times 1$$

$$12 = 3 \times 4$$

$$12 = 6 \times 2$$



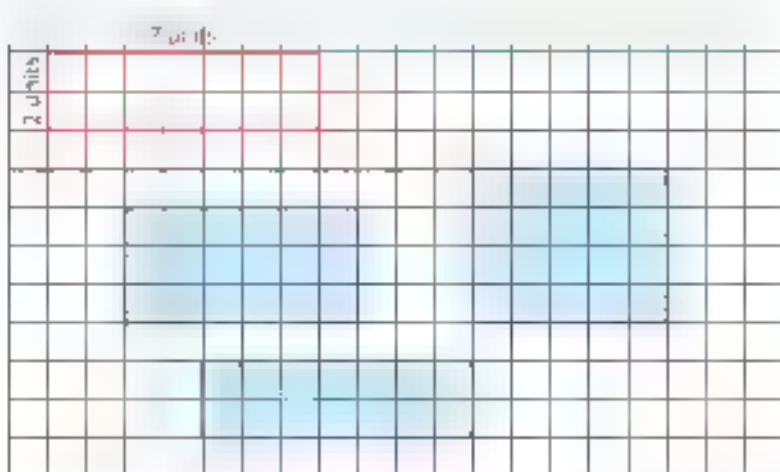
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## Activity

Draw 3 different rectangles with a perimeter of 18 linear units

$$\text{Length} + \text{width (half perimeter)} = 8 + 2 = 9 \text{ units}$$

$$L + W = 7 + 2 = 9 \quad L + W = 7 + 2 = 9 \quad L + W = 5 + 4 = 9$$



## Lesson

## Applications on Perimeter and Area

تطبيقات حياتية على المحيط والمساحة

## Ex

A rectangular room measuring  
6 meters long and 5 meters wide  
Find its perimeter and area  
Perimeter =  $6 + 5 + 6 + 5 = 22$  meters  
Area =  $5 \times 6 = 30$  square meters



## Activity

Shaimaa is sewing a border on a square baby blanket. The length of the blanket is 45 cm, and the width is 45 cm. How long will the border be?

The length of the border

$$= 45 + 45 + 45 + 45 = 180 \text{ cm}$$



## Activity

Farouk is building a patio out of tiles. He wants the length of the patio to be 7 tiles across and its width to be 6 tiles. How many tiles will he use in all to build the patio?

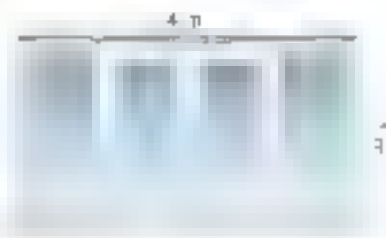
The area of the border

$$= 7 \times 6 = 42 \text{ tiles}$$

### Activity

Omnia wants to put a wooden frame around her window. The window is 4 meters tall and 1 meter wide.

How much wood does she need for the frame?

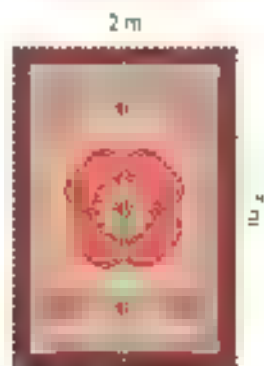


The length of the wooden frame

$$= 4 + 1 + 4 + 1 = 10 \text{ m}$$

### Activity

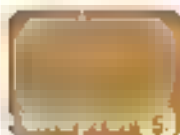
A rug is 3 meters long and 2 meters wide. What is the area of the rug?



Area

$$= 3 \times 2 = 6 \text{ square meters}$$





## Lesson

### Multiplying by Multiples of 10

الضرب في مضاعفات العدد 10

Start by multiplying by 10

$$5 \times 10 = 10$$
$$= 100$$

20

20

20

20

$$3 \times 40 = 40$$
$$= 120$$

40

40

## Learn

$$6 \times 70 = 420$$

$$9 \times 50 = 540$$

When multiplying by multiples of 10, we take out the zeros and then continue the multiplication

عند الضرب في مضاعفات الـ 10 نخرج الصفر ثم نكمل الضرب

## Activity

Find the result

$$5 \times 30 = 150$$

$$4 \times 60 = 240$$

$$7 \times 20 = 140$$

$$7 \times 40 = 280$$

$$20 + 20 + 20 + 20 = 4 \times 20 = 80$$

$$30 + 30 + 30 = 3 \times 30 = 90$$

$$3 \times 90 = 90 + 90 + 90 = 270$$

$$3 \times 70 = 70 + 70 + 70 = 210$$



# Activity

Complete as in the example:

**Ex.**

$$4 \times 10 = 40$$

$$25 \times 10 = 250$$

$$7 \times 10 = 70$$

$$12 \times 10 = 120$$

$$6 \times 10 = 60$$

$$65 \times 10 = 650$$

$$44 \times 10 = 440$$

$$60 \times 10 = 600$$

$$9 \times 10 = 90$$

$$52 \times 10 = 520$$

$$8 \times 10 = 80$$

# Activity

Complete as in the example:

**Ex.**

$$30 = 3 \times 10$$

$$4 \times 30 = 4 \times 3 \times 10 = 12 \times 10 = 120$$

$$4 \times 3 = 12$$

$$90 = 9 \times 10$$

$$7 \times 90 = 7 \times 9 \times 10 = 63 \times 10 = 630$$

$$7 \times 9 = 63$$

$$5 \times 60 = 5 \times 6 \times 10 = 30 \times 10 = 300$$

$$4 \times 80 = 4 \times 8 \times 10 = 32 \times 10 = 320$$

$$5 \times 80 = 5 \times 8 \times 10 = 40 \times 10 = 400$$

$$9 \times 30 = 9 \times 3 \times 10 = 27 \times 10 = 270$$

$$7 \times 50 = 7 \times 5 \times 10 = 35 \times 10 = 350$$

$$4 \times 90 = 4 \times 9 \times 10 = 36 \times 10 = 360$$

# Chapter 6

## Chapter Lessons

### Lesson 1 Patterns of Multiplying by Multiples of 10

Explains pattern is observed when multiplying by multiples of 10

### Lesson 2 Strategies of Multiplying by 9

Introducing and applying patterns and a strategy when multiplying by 9

- Teaching strategy: one strategy for multiplying by 9

### Lesson 3 Facts on Multiplication and Addition

- Identifying patterns in multiplication and addition facts

Explains how pattern is observed in multiplication and addition facts when multiplying problems

Applying patterns in the addition and multiplication facts quickly and accurately

### Lesson 4 Composing and Ordering Numbers in Different Forms

Identifying and describing patterns in the Place Value Chart. Composing numbers in different ways. Applying strategies for understanding numbers

### Lesson 5 Addition Strategies

Explains a number of strategies for the addition problem. Explains the problem is solving different problems using a strategy

### Lesson 6 Subtraction Strategies

Explaining the relationship between addition and subtraction. Applying strategies for subtraction problems. Applying subtraction strategies to solve problems

### Lesson 7 Applications on Addition and Subtraction

Applying strategies on addition and subtraction problems. Applying strategies on identifying the change and applications for growth

### Lessons 8&9 Capacity - Reading Capacity

Defining capacity as the measurement of the amount of a substance. Explaining the relationship between capacity and volume. Identifying the capacity of different substances. Identifying the capacity of different substances. Reading volume measurements of a standard unit of capacity. Applying strategies for understanding capacity measurement.

## Lesson

1

## أنماط الضرب في مضاعفات العدد 10

## Learn

When multiplying by multiples of 10, we take out the zeros and then continue the multiplication.

*Multiples of 10 are, 10, 20, 30, 40, 50, 60, ..*

Ex.

$$6 \times 4 = 24$$

$$2 \times 4 = 8$$

$$6 \times 4 = 24$$

$$2 \times 4 = 8$$

$$6 \times 40 = 240$$

$$2 \times 40 = 80$$

$$6 \times 400 = 2400$$

$$2 \times 400 = 800$$

$$6 \times 4000 = 24000$$

$$2 \times 4000 = 8000$$



## Activity

Find the product

$$\textcircled{a} 9 \times 30 = 270$$

$$\textcircled{b} 8 \times 20 = 160$$

$$\textcircled{c} 60 \times 40 = 2,400$$

$$\textcircled{d} 90 \times 20 = 1,800$$

$$\textcircled{e} 6 \times 200 = 1,200$$

$$\textcircled{f} 5 \times 200 = 1,000$$

$$\textcircled{g} 500 \times 30 = 15,000$$

$$\textcircled{h} 200 \times 3,000 = 600,000$$

## Activity

Complete the following:

$$\textcircled{a} 50 \times 2 = 100$$

$$\textcircled{b} 30 \times 500 = 15,000$$

$$\textcircled{c} 80 \times 200 = 16,000$$

$$\textcircled{d} 10 \times 2,000 = 20,000$$

$$\textcircled{e} 30 \times 70 = 2,100$$

$$\textcircled{f} 500 \times 20 = 10,000$$

$$\textcircled{g} 50 \times 40 = 2,000$$

$$\textcircled{h} 1,000 \times 50 = 50,000$$

## Activity

Complete the following:

$$\textbf{E} \quad 4 \times 60 = 4 \times 6 \times 10 = 24 \times 10 = 240$$

$$\textcircled{a} 8 \times 30 = ( 8 \times 3 ) \times 10 = 24 \times 10 = 240$$

$$\textcircled{b} 5 \times 80 = ( 5 \times 8 ) \times 10 = 40 \times 10 = 400$$

$$\textcircled{c} 6 \times 200 = ( 6 \times 2 ) \times 100 = 12 \times 100 = 1,200$$

$$\textcircled{d} 9 \times 4,000 = ( 9 \times 4 ) \times 1,000 = 36 \times 1,000 = 36,000$$

## Lesson

-2-

## استراتيجيات لضرب في العدد 9

2

Ex. 9 X 6

**1** Number your fingers from the left hand to the right hand (1-10).



**2** Starting on the left count until you get to the 6<sup>th</sup> finger.



**3** Put that finger down. This is the division between the Tens and the Ones now



Count how many fingers are on the left in the Tens, and how many are on the right of the down finger and these are the Ones.

5 Fingers  
5 Tens

4 Fingers  
4 Ones



$$9 \times 6 = 54$$

# Activity

Use the Finger Trick Strategy to find:

a



$$5 \times 9 = 45$$

b



$$8 \times 9 = 72$$

c



$$9 \times 2 = 18$$

Start

$$1 \times 9 = 9$$

$$0 + 9 = 9$$

$$2 \times 9 = 18$$

$$1 + 8 = 9$$

$$3 \times 9 = 27$$

$$2 + 7 = 9$$

$$4 \times 9 = 36$$

$$3 + 6 = 9$$

$$5 \times 9 = 45$$

$$4 + 5 = 9$$

$$6 \times 9 = 54$$

$$5 + 4 = 9$$

$$7 \times 9 = 63$$

$$6 + 3 = 9$$

$$8 \times 9 = 72$$

$$7 + 2 = 9$$

$$9 \times 9 = 81$$

$$8 + 1 = 9$$

$$10 \times 9 = 90$$

$$9 + 0 = 9$$

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100
101	102	103	104	105	106	107	108	109	110
111	112	113	114	115	116	117	118	119	120

### 10 Tent-Facts Strategy

**Ex.** To find  $9 \times 6$

Draw a number line  $0 \times 6$  then cross one group of 6

6	6	6	6	6	6	6	6	6	6
---	---	---	---	---	---	---	---	---	---

$$9 \times 6 = (10 \times 6) - 6 = 54$$





## Activity

Use the **Times Facts Strategy** to find:

Ⓐ  $9 \times 7$

7	7	7	7	7	7	7	7	7	7
---	---	---	---	---	---	---	---	---	---

$$9 \times 7 = (10 \times 7) - 7 = 70 - 7 = 63$$

Ⓑ  $9 \times 5$

5	5	5	5	5	5	5	5	5	5
---	---	---	---	---	---	---	---	---	---

$$9 \times 5 = 10 \times 5 - 5 = 50 - 5 = 45$$

Ⓒ  $9 \times 8$

8	8	8	8	8	8	8	8	8	8
---	---	---	---	---	---	---	---	---	---

$$9 \times 8 = 10 \times 8 - 8 = 80 - 8 = 72$$

Ⓓ  $9 \times 3$

3	3	3	3	3	3	3	3	3	3
---	---	---	---	---	---	---	---	---	---

$$9 \times 3 = 10 \times 3 - 3 = 30 - 3 = 27$$

## Activity

Complete using ( $<$  = or  $>$ ):

Ⓐ  $9 \times 4 < 5 \times 9$

Ⓑ  $2 \times 9 = 3 \times 6$

Ⓒ  $9 \times 7 > 6 \times 9$

Ⓓ  $8 \times 6 > 9 \times 5$

## Activity

Complete the following

Ⓐ  $9 \times 3 = 27$

Ⓑ  $9 \times 5 = 45$

Ⓒ  $9 \times 9 = 81$

Ⓓ  $8 \times 9 = 72$

Ⓔ  $9 \times 6 = 54$

Ⓕ  $0 \times 9 = 0$

# Lesson

## -3-

### حقائق الضرب والجمع

#### Adding by Zero

The sum of any number and  $0$  is the same number

**Ex.**  $0 + 3 = 3$

#### Multiplying by Zero

The product of any number and  $0$  is zero

**Ex.**  $0 \times 3 = 0$

#### Adding to 1

The sum of any number and  $1$  is the number which comes just after

**Ex.**  $6 + 1 = 7$

#### Multiplying to 1

The product of any number and  $1$  is the same number

**Ex.**  $8 \times 1 = 8$

#### Commutative Property of Addition

Addends can be added in any order

**Ex.**  $7 + 3 = 10$

$3 + 7 = 10$

#### Commutative Property of Multiplication

Factors can be multiplied in any order

**Ex.**  $5 \times 4 = 20$

$4 \times 5 = 20$

#### Doubling Numbers = Multiplying by 2

**Ex.**  $6 + 6 = 12$      $6 \times 2 = 12$

So,  $6 + 6 = 6 \times 2$

#### Distribution Property of Multiplication

**Ex.**  $5 \times 9 = 5 \times (3 + 6)$   
 $= (5 \times 3) + (5 \times 6)$   
 $= 15 + 30 = 45$



## Activity

Find the result of the following

$$\textcircled{A} 4 + 0 = 4$$

$$\textcircled{B} 0 + 6 = 6$$

$$\textcircled{C} 8 \times 0 = 0$$

$$\textcircled{D} 0 \times 7 = 0$$

$$\textcircled{E} 7 + 1 = 8$$

$$\textcircled{F} 1 + 3 = 4$$

$$\textcircled{G} 6 \times 1 = 6$$

$$\textcircled{H} 1 \times 4 = 4$$

$$\textcircled{I} 6 \times 9 = 54$$

$$\textcircled{J} 9 \times 6 = 54$$

$$\textcircled{K} 7 + 3 = 10$$

$$\textcircled{L} 4 + 5 = 9$$

$$\textcircled{M} 8 + 8 = 16$$

$$\textcircled{N} 9 \times 2 = 18$$

$$\textcircled{O} 2 \times 7 = 14$$

## Activity

Complete the following:

$$\textcircled{A} 0 + 7 = 7$$

$$\textcircled{B} 1 \times 7 = 7$$

$$\textcircled{C} 1 + 6 = 7$$

$$\textcircled{D} 1 + 7 = 8$$

$$\textcircled{E} 0 \times 6 = 0$$

$$\textcircled{F} 4 + 3 = 3 + 4$$

$$\textcircled{G} 9 + 5 = 5 + 9$$

$$\textcircled{H} 8 \times 4 = 4 \times 8$$

$$\textcircled{I} 5 \times 6 = 6 \times 5$$

$$\textcircled{J} 7 + 7 = 7 \times 2$$

$$\textcircled{K} 2 \times 8 = 8 + 8$$

$$\textcircled{L} 9 + 9 = 2 \times 9$$

$$\textcircled{M} 7 \times 5 = 7 \times 2 + 7 \times 3 = 14 + 21 = 35$$

$$\textcircled{N} 9 \times 12 = 9 \times 10 + 9 \times 2 = 90 + 18 = 108$$

$$\textcircled{O} 7 \times 10 = 7 \times 3 + 7 \times 7 = 21 + 49 = 70$$

## Activity

Complete using ( $\times$  or  $+$ ).

$$\textcircled{A} 5 \times 0 = 0$$

$$\textcircled{B} 8 + 0 = 8$$

$$\textcircled{C} 6 \times 1 = 6$$

$$\textcircled{D} 6 + 1 = 7$$

$$\textcircled{E} 6 + 7 = 7 + 6$$

$$\textcircled{F} 6 \times 7 = 7 \times 6$$

$$\textcircled{G} 7 \times 8 = (7 \times 5) + (7 \times 3)$$

# Lesson

## مقارنة وترتيب الأعداد بصيغ متنوعة

Thousands					
Hundreds	Tens	Ones	Hundreds	Tens	Ones
3	6	4	8	7	2

Standard Form 364,872

Word Form Three hundred sixty-four thousand, eight hundred and seventy-two

Short-word Form 364 thousand and 872

Expanded Form  $300,000 + 60,000 + 4,000 + 800 + 70 + 2$

Units Form 364 Thousands + 8 Hundreds + 7 Tens + 2 Ones

Place Value	Hundreds Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
	↑	↑	↑	↑	↑	↑
	5	5	5	5	5	5
Value	↓	↓	↓	↓	↓	↓
	500,000	50,000	5,000	500	50	5

**Ex.** The digit 5 in 35,792 is in the **Thousands** place and its value is **5,000**



**Ex.**

- The number 56 258 comes just after 56 257
- The number that comes just after 56 258 is 56 259

**Ex.**

- The number 336 999 comes just before 337 000
- The number that comes just before 336 999 is 336 998

## Activity

Complete the following.

- ① Twenty-five thousand, six hundred and eleven = 25 611

(in standard form)

- ② 700,618 (in word form) Seven hundred thousand, six hundred & eighteen

- ③  $700,000 + 70,000 + 5,000 + 800 + 50 + 3 = 775\,853$

- ④ 98 Thousands + 6 Ones + 5 Tens + 7 Hundreds = 98,756

- ⑤  $70 + 0 + 0 + 4 = 74$

- ⑥  $7,856 = 7,000 + 800 + 50 + 6$

- ⑦  $55 \times 159 = 5 \text{ Tens} + 552 \text{ Thousands} + 9 \text{ Ones} + 1 \text{ Hundred}$

- ⑧ The number that comes just after 36,299 is 36 300

- ⑨ 700 250 comes just after 700 249

- ⑩ The number 900 000 comes right after 899 999

- ⑪ The number that comes just before 75,000 is 74 999

- ⑫ 3 156 comes just before 3 157

- ⑬ The number 15 199 comes just before 15,200.

### Comparing and Ordering Numbers in Different Forms

- Ⓐ The **place value** of 5 in 224,569 is **Hundreds**
- Ⓑ The **place value** of 7 in 789,895 is **Hundred Thousands**
- Ⓒ The **value** of the digit 7 in 79 159 is **70 000**
- Ⓓ The **value** of the digit 2 in 8 128 is **20**
- Ⓔ The **largest** 5-digit number is **99 999**
- Ⓕ The **smallest** 6-digit number is **100 000**
- Ⓖ The **largest** and the **smallest** numbers formed from the digits (7 2 0 6 and 3) are **76 320** and **20 367**

### Activity

Complete the following table.

Number	The <b>Place Value</b> of the Encircled Digit	The <b>value</b> of the Encircled Digit
Ⓐ 4 55 369	<b>Hundred thousands</b>	<b>400 000</b>
Ⓑ 3 6 2 512	<b>Ten thousands</b>	<b>60 000</b>
Ⓒ 78 0 739	<b>Thousands</b>	<b>0</b>
Ⓓ 696 2 7 4	<b>Tens</b>	<b>70</b>
Ⓔ 51 78 0	<b>Ones</b>	<b>0</b>
Ⓕ 39 9 24	<b>Hundreds</b>	<b>900</b>



## Activity

Complete using the following set of numbers

Ⓐ (3, 5, 0, 4, 7)

The **largest** number    75,430

The **smallest** number    30,457

Ⓑ (8, 5, 4)

The **largest** 6-digit number    888 854

The **smallest** 6-digit number    444 458

## Activity

Complete using (< , = or >).

Ⓐ 255,458    <    667,102

Ⓑ 155,258    <    155,528

Ⓒ 50,502    >    50,205

Ⓓ 45,000 + 45    <    45,450

Ⓔ 20 Hundreds    =    2,000

Ⓕ 3 + 500 + 2,000    <    3,520

Ⓖ 45 Thousands + 5 Hundreds + 3 Tens    45,810

Ⓗ The smallest 5 different-digit number    <    12,345

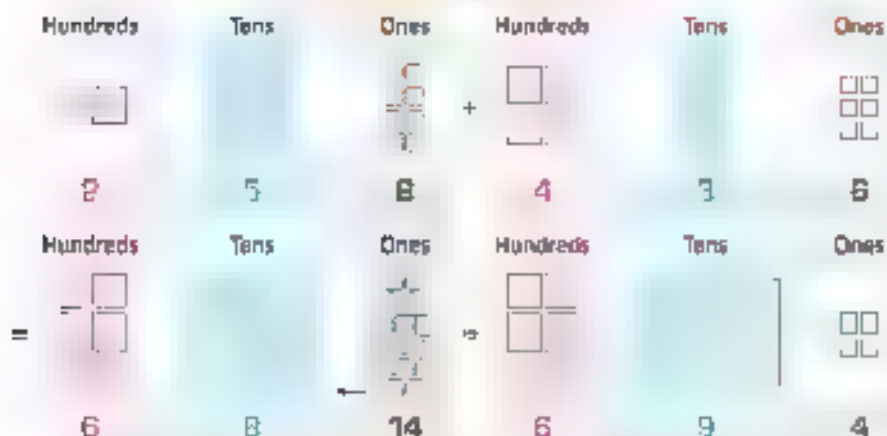
Ⓘ Ninety thousand and nine    <    900,009

## Lesson

5

استراتيجيات الجمع

Ex 5

To add:  $258 + 436$ To add:  $284 + 373$ 



# Activity

Ⓐ Add:  $275 + 219$



So,  $275 + 219 = 494$

Ⓑ Add:  $478 + 165$



So,  $478 + 165 = 643$

**Ex.****To add:  $3,567 + 1,521$** 

$3,567$	$=$	$3,000$	$+$	$500$	$+$	$50$	$+$	$7$	
$1,521$	$=$	$1,000$	$+$	$500$	$+$	$20$	$+$	$1$	Sum
		<u><math>4,000</math></u>	$+$	<u><math>1,000</math></u>	$+$	<u><math>80</math></u>	$+$	<u><math>8</math></u>	$= 5,088$

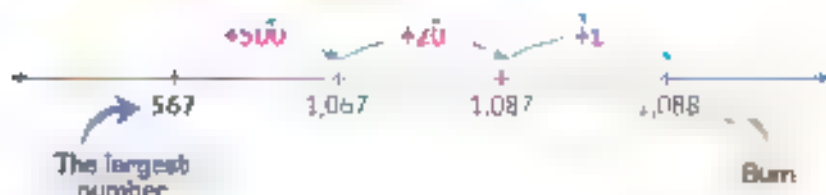
**Activity****Add using the Expanded Form Strategy**

Problem	Work Space	Sum
Ⓐ $567 + 321$	$500 + 60 + 7$ $300 + 20 + 1$ $800 + 80 + 8$	888
Ⓑ $783 + 138$	$700 + 80 + 3$ $100 + 30 + 8$ $800 + 110 + 11$	921
Ⓒ $6,237 + 1,582$	$6,000 + 200 + 30 + 7$ $1,000 + 500 + 80 + 2$ $7,000 + 700 + 110 + 9$	7,819
Ⓓ $2,514 + 279$	$2,000 + 500 + 10 + 4$ $+ 200 + 70 + 9$ $2,000 + 700 + 80 + 13$	2,793

# 143 The Number Line Strategy

**Ex.**

To add:  $567 + 521$



## Activity

Solve the addition problems below using The Number Line Strategy

Problem	Work Space	Sum
Ⓐ $258 + 321$		888
Ⓑ $6,237 + 1,582$		7 819
Ⓒ $2,514 + 279$		2 793
Ⓓ $1,481 + 503$		2 984

## Lesson

6

استراتيجيات طرح

6

Ex.

Subtract  $789 - 247 = 542$ 

Hundreds	Tens	Ones
5	4	2

Check  $542 + 247 = 789$ 

- To check your answer we add the difference to the subtrahend to get the minuend

Ex.

Check  $5 + 4 = 9$ 

Ex.

Subtract  $5,627 - 1,285 = 4,342$ 

Thousands	Hundreds	Tens	Ones
4	3	4	2

Check

 $4,342 + 1,285 = 5,627$

# Activity

Solve the following subtraction problems using the Place Value Picture Strategy.

Ⓐ  $785 - 234 = 551$

Hundreds



Tens



Ones



Check:  $234 + 551 = 785$

Ⓑ  $628 - 156 = 472$

Hundreds



Tens

7

Ones



Check:  $156 + 472 = 628$

Ⓒ  $3,524 - 1,403 = 2,121$

Thousands



2

Hundreds



1

Tens

2

Ones



1

Check:  $1,403 + 2,121 = 3,524$

Ⓓ  $6,625 - 2,162 = 4,463$

Thousands



4

Hundreds



4

Tens

6

Ones



3

Check:  $2,162 + 4,463 = 6,625$

**Ex.****Subtract:  $985 - 453$** **Check**  $532 + 453 = 985$ **Activity**Solve the addition problems below using  
**The Number Line Strategy****Subtraction Problem****Check**

$853 - 532 = 321$

**a**

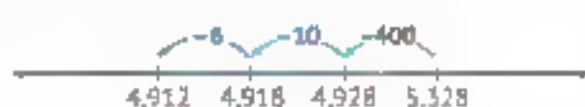
$$\begin{array}{r}
 532 \\
 + 321 \\
 \hline
 853
 \end{array}$$

$7,625 - 1,213 = 6,412$

**b**

$$\begin{array}{r}
 1\,213 \\
 + 6\,412 \\
 \hline
 7\,625
 \end{array}$$

$5,328 - 416 = 4,912$

**c**

$$\begin{array}{r}
 416 \\
 + 4\,912 \\
 \hline
 5\,328
 \end{array}$$



# Lesson 7

## تطبيقات حياتيه على الجمع و طرح



### Help your child know that

The following steps can be followed in the solution

1. **understand** what do we want to find. Circle the questions
2. **Plan** what facts do you need underline them
3. **Solve** using one of the methods we learned
4. **Check** whether your answer makes sense or not

Some keywords that can be used to discover the appropriate way to solve the problem, but you should not rely entirely on these words. The problem should be read and understood well.

### Some Keywords

#### of Addition

- Add
- Total
- In all
- Sum
- Altogether
- And

#### of Subtraction

- Left
- Subtract
- How many more/less
- Remain
- Remainder
- Difference
- Take away

### Activity

The following table shows the borrowed books from a library during the month of September

Grade	P1	P2	P3	P4	P5
Books Borrowed	435	317	278	107	259

Answer the following questions

- ① How many books did students borrow from P1 and P2 grades together?

$$435 + 317 = 752$$

- ② How many books did students borrow from P<sub>1</sub>, P<sub>4</sub> and P<sub>5</sub> grades together?

$$278 + 107 + 239 = 624$$

- ③ How many more books have students borrowed from P<sub>5</sub> grade than P<sub>4</sub> grade?

$$239 - 107 = 132$$

- ④ Which class borrowed the smallest number of books?

P<sub>1</sub>

### Activity

Amin's family is saving to buy a new TV. The TV costs 4,590 LE on sale. They have saved 2,410 LE so far. How much more money do they need to buy the TV?

$$4,590 - 2,410 = 2,180 \text{ LE}$$

### Activity

- ① Omar just moved to the city. He found an apartment to rent for 3,340 LE per month. Electricity and gas will cost him 692 LE per month.

How much money will it cost him each month to live in the apartment?

$$3,340 + 692 = 4,032 \text{ LE}$$

- ② If Omar had 5,000 LE to spend each month. How much money does he have left after he pays for rent, electricity, and gas?

$$5,000 - 4,032 = 968 \text{ LE}$$

### Activity

Mr. Mahmoud raises chickens. In the past two years, his chickens have laid 5,350 eggs. Last year, his chickens laid 2,120 eggs.

How many eggs did his chickens lay two years ago?

$$5,350 - 2,120 = 3,230 \text{ eggs}$$



# Lessons 7&8

الساعة السابعة

**Capacity** The amount of liquid that a container can hold

## Units of Capacity

الوحدات السعة



6 L



2 L



1 L



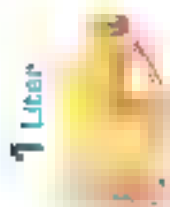
250 mL



125 mL



330 mL



1 Liter



1 Liter = 1,000 Milliliter

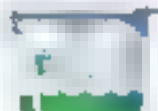
## Activity

Circle the largest capacity container

A

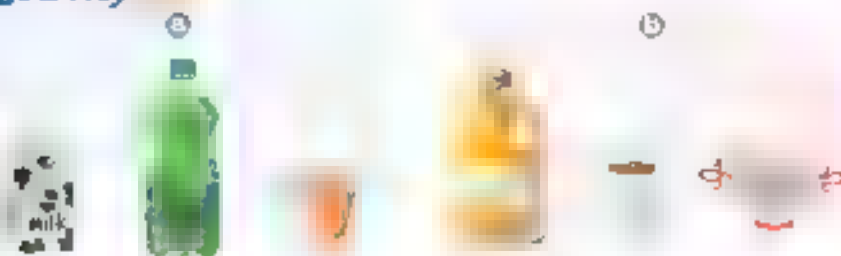


B



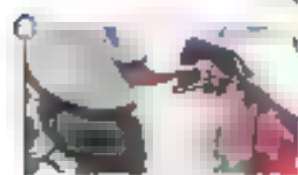
## Activity

Circle the smallest capacity container



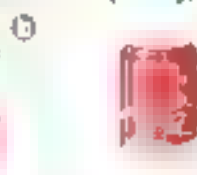
## Activity

What is better for measuring the volume of liquid in capacity, in milliliters or liters?



Petrol in a car

Milliliter      Liter



Soda in a can

Milliliter      Liter



Spoonful of medicine

Milliliter      Liter



Dishwashing soap

Milliliter      Liter



Water in a bottle

Milliliter      Liter



Shampoo in a bottle

Milliliter      Liter



Juice in a juice box

Milliliter      Liter



Water in a bathtub

Milliliter      Liter



Perfume in a bottle

Milliliter      Liter

# Activity

Complete the following

- ① 1 liter = **1,000** milliliters
- ② 5,000 ml = **5** liters
- ③ 2 liter = **2,000** milliliters
- ④ 7,000 ml = **7** liters
- ⑤ To measure the capacity of a cup of tea we use **milliliters**
- ⑥ The liter is used to measure **capacity**

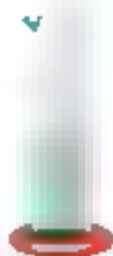
## The Graduated Cylinder

It is a tool for measuring the capacity of liquids

It is graduated like a ruler

In the opposite figure:

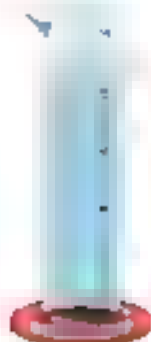
The capacity of the liquid in the graduated cylinder is 50 ml



# Activity

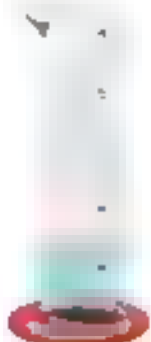
Write the capacity for each of the following

①



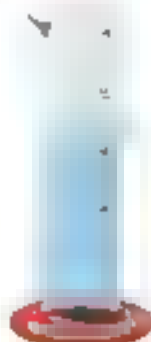
90 ml

②



30 ml

③



70 ml

# Guide Answers

## Chapter 1

### Lesson 1

#### Patterns

1



2

50 50 50

50 50 50

10 10 10

4 10 10 4



3

1



2



3



4



### Lesson 2

#### More of Bar Graphs

1

1

Favourite Fruit	Apples	Bananas	Oranges	Pears
Number of Students	10	15	20	25

2

3

Favourite Subject	Maths	Arabic	Science	Social Studies	English
Tallies					
Number of Students	4	4	4	4	4



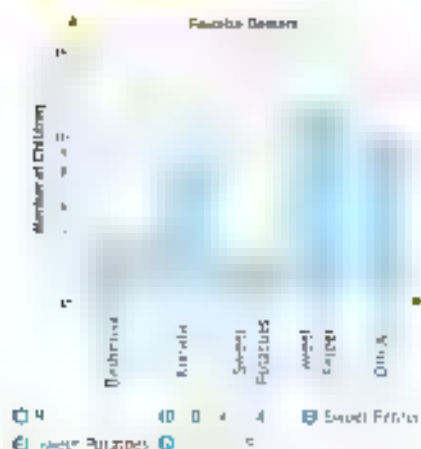
4

Design	Maths	Arabic	Science	Social Studies	English
Number of Students	10	8	6	4	2

5

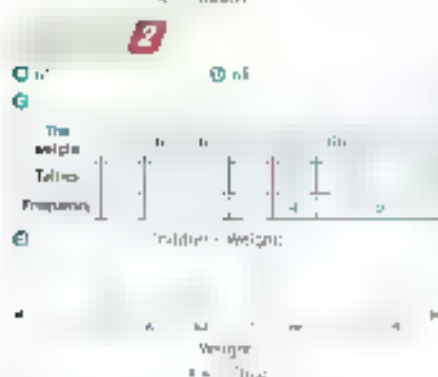
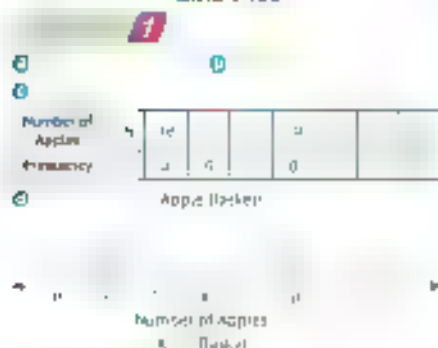
Favourite Desserts	Butterfly	Kulcha	Samosa	Choco Pudding	Donut
Tallies					
Number of Children	4	4	4	4	4

## Grade 3 Math



## Lesson 3

### Line Plot



## Chapter 2

### Lessons 4-6

### Measuring Lengths in (Centimeter, Meter and Millimeter)

- 1**
- 1.1 cm
  - 1.2 cm
  - 1.3 cm
  - 1.4 cm
  - 1.5 cm
  - 1.6 cm
  - 1.7 cm
  - 1.8 cm
  - 1.9 cm
  - 2.0 cm

- 2**
- 2.1 cm
  - 2.2 cm
  - 2.3 cm
  - 2.4 cm
  - 2.5 cm
  - 2.6 cm
  - 2.7 cm
  - 2.8 cm
  - 2.9 cm
  - 3.0 cm

- 3**
- 3.1 cm
  - 3.2 cm
  - 3.3 cm
  - 3.4 cm
  - 3.5 cm
  - 3.6 cm
  - 3.7 cm
  - 3.8 cm
  - 3.9 cm
  - 4.0 cm

- 4**
- 4.1 cm
  - 4.2 cm
  - 4.3 cm
  - 4.4 cm
  - 4.5 cm
  - 4.6 cm
  - 4.7 cm
  - 4.8 cm
  - 4.9 cm
  - 5.0 cm

- 5**
- 5.1 cm
  - 5.2 cm
  - 5.3 cm
  - 5.4 cm
  - 5.5 cm
  - 5.6 cm
  - 5.7 cm
  - 5.8 cm
  - 5.9 cm
  - 6.0 cm

- 6**
- 6.1 cm
  - 6.2 cm
  - 6.3 cm
  - 6.4 cm
  - 6.5 cm
  - 6.6 cm
  - 6.7 cm
  - 6.8 cm
  - 6.9 cm
  - 7.0 cm

## Chapter 2

### Lessons 1-4

### Thousands, Ten Thousands, and Hundred Thousands - Numbers in Different Forms

#### First

- 1**
- 1.1 thousand
  - 1.2 thousand
  - 1.3 thousand
  - 1.4 thousand
  - 1.5 thousand
  - 1.6 thousand
  - 1.7 thousand
  - 1.8 thousand
  - 1.9 thousand
  - 2.0 thousand

Ⓐ Standard Form: 9,020

Word Form: Nine thousand, twenty-eight

Ⓑ Standard Form: 6,520

Word Form: Six thousand, five hundred twenty

Ⓒ Standard Form: 400

Word Form: Four thousand, seven hundred eight

Ⓓ Standard Form: 24,138

Word Form: Twenty-four thousand, one hundred thirty-eight

Ⓔ Standard Form: 400

Word Form: Four hundred thousand three hundred eighty

Ⓕ Standard Form: 367,880

Word Form: Three hundred sixty-seven thousand four hundred eighty

Ⓖ Standard Form: 200,040

Word Form: Two hundred thousand forty

2

Thousands

Thousands	Tens	Ones	Thousands	Tens	Ones
1	2	3	4	5	6

Word Form: Eight thousand, four hundred thirty

Thousands

Thousands	Tens	Ones	Thousands	Tens	Ones
1	2	3	4	5	6

Word Form: Six thousand four hundred thirty

Thousands

Thousands	Tens	Ones	Thousands	Tens	Ones
1	2	3	4	5	6

Word Form: Six thousand four hundred thirty

Thousands

Thousands	Tens	Ones	Thousands	Tens	Ones
1	2	3	4	5	6

Standard Form: 4,000

Thousands

Thousands	Tens	Ones	Thousands	Tens	Ones
1	2	3	4	5	6

Standard Form: 3,000

Thousands

Thousands	Tens	Ones	Thousands	Tens	Ones
1	2	3	4	5	6

Standard Form: 50,000

3

- Ⓐ 0      Ⓑ 14      Ⓒ 30
- Ⓓ 4      Ⓔ 100

4

- Ⓐ Five thousand one hundred thirty
- Ⓑ One five thousand thirty
- Ⓒ One thousand one hundred thirty
- Ⓓ One hundred thirty thousand
- Ⓔ Five thousand three hundred and thirty

Second

1

The Number	The Value	The Place Value
2 1 3 6	2000	Thousands
5 7 0 9	200	Hundreds
3 0 4 2	2	Tens
3 4 0	30	Tens
11 0	10	Tens

2

- Ⓐ Four hundred      Ⓑ 100,000      Eight hundred
- Ⓒ One hundred      Ⓓ 5,000      Five thousand
- Ⓔ One hundred      Thousands
- Ⓕ 100 thousands      100 tens
- Ⓖ 100 hundreds      10 tens
- Ⓗ 100 tens      10 thousands
- Ⓘ 100 tens      10 thousands
- Ⓙ 100 hundreds      10 thousands

3

- Ⓐ 100,000      10,000      400      10      9
- Ⓑ 10,000      100      10      10      4
- Ⓒ 100,000      100      10
- Ⓓ 100,000      1,000      400      10      100      10      100      10      100      10

4

- Ⓐ 10      Ⓑ 10      Ⓒ 100
- Ⓓ 10      Ⓔ 100

5

- Ⓐ 40      thousands      hundred      tens      ones
- Ⓑ 5,028      thousands      hundreds      tens      ones
- Ⓒ 10      10      10      10      10
- Ⓓ 100      thousands      10 hundreds      10 tens      ones
- Ⓔ 100      100      100      100

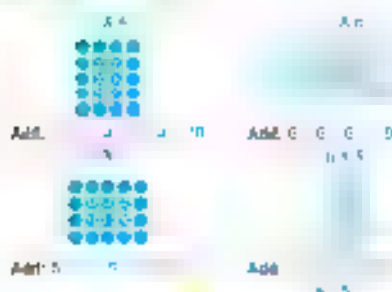


- 10  $h = 1$ ,  $n = 11$   
So,  $h = 1$  and  $n = 11$
- 11  $h = 1$   
So,  $h = 1$  and  $n = 11$
- 12  $h = 1$ ,  $n = 11$
- 13  $h = 1$   
So,  $h = 1$  and  $n = 11$
- 14  $h = 1$ ,  $n = 11$
- 15  $h = 1$ ,  $n = 11$
- 16  $h = 1$ ,  $n = 11$

3

- 10  $h = 1$ ,  $n = 11$   
So,  $h = 1$  and  $n = 11$
- 11  $h = 1$   
So,  $h = 1$  and  $n = 11$
- 12  $h = 1$ ,  $n = 11$
- 13  $h = 1$ ,  $n = 11$
- 14  $h = 1$ ,  $n = 11$
- 15  $h = 1$ ,  $n = 11$
- 16  $h = 1$ ,  $n = 11$

4



## Lesson 7

### Commutative Property in Multiplication

1

- 10  $h = 1$ ,  $n = 11$   
So,  $h = 1$  and  $n = 11$
- 11  $h = 1$   
So,  $h = 1$  and  $n = 11$
- 12  $h = 1$ ,  $n = 11$
- 13  $h = 1$ ,  $n = 11$
- 14  $h = 1$ ,  $n = 11$
- 15  $h = 1$ ,  $n = 11$
- 16  $h = 1$ ,  $n = 11$

- 10  $h = 1$ ,  $n = 11$   
So,  $h = 1$  and  $n = 11$
- 11  $h = 1$   
So,  $h = 1$  and  $n = 11$
- 12  $h = 1$ ,  $n = 11$
- 13  $h = 1$ ,  $n = 11$
- 14  $h = 1$ ,  $n = 11$
- 15  $h = 1$ ,  $n = 11$
- 16  $h = 1$ ,  $n = 11$

2

- 10  $h = 1$ ,  $n = 11$   
So,  $h = 1$  and  $n = 11$
- 11  $h = 1$   
So,  $h = 1$  and  $n = 11$
- 12  $h = 1$ ,  $n = 11$
- 13  $h = 1$ ,  $n = 11$
- 14  $h = 1$ ,  $n = 11$
- 15  $h = 1$ ,  $n = 11$
- 16  $h = 1$ ,  $n = 11$

3

- 10  $h = 1$ ,  $n = 11$   
So,  $h = 1$  and  $n = 11$
- 11  $h = 1$   
So,  $h = 1$  and  $n = 11$
- 12  $h = 1$ ,  $n = 11$
- 13  $h = 1$ ,  $n = 11$
- 14  $h = 1$ ,  $n = 11$
- 15  $h = 1$ ,  $n = 11$
- 16  $h = 1$ ,  $n = 11$

## Chapter 3

### Lessons 1&2

#### Word Problems and Applications on Multiplication

1

- 10  $h = 1$ ,  $n = 11$   
So,  $h = 1$  and  $n = 11$
- 11  $h = 1$   
So,  $h = 1$  and  $n = 11$
- 12  $h = 1$ ,  $n = 11$
- 13  $h = 1$ ,  $n = 11$
- 14  $h = 1$ ,  $n = 11$
- 15  $h = 1$ ,  $n = 11$
- 16  $h = 1$ ,  $n = 11$

2

- 10  $h = 1$ ,  $n = 11$   
So,  $h = 1$  and  $n = 11$
- 11  $h = 1$   
So,  $h = 1$  and  $n = 11$
- 12  $h = 1$ ,  $n = 11$
- 13  $h = 1$ ,  $n = 11$
- 14  $h = 1$ ,  $n = 11$
- 15  $h = 1$ ,  $n = 11$
- 16  $h = 1$ ,  $n = 11$



## Grade 3 Answers

3

4. a. 11      b. 10      c. 5      d. 10      e. 10
5. a bag of oranges contains 10 oranges. How many oranges are there in 10 bags? 100 oranges
6. Arhman has 100 legs. How many legs are there in 10 snails? 200 legs

## Lessons 3a4

### Multiples

1

1. ☐ A   ☐ B   ☐ C   ☐ D   ☐ E
2. ☐ A   ☐ B   ☐ C   ☐ D   ☐ E
3. ☐ A   ☐ B   ☐ C   ☐ D   ☐ E
4. ☐ A   ☐ B   ☐ C   ☐ D   ☐ E

1000 ÷ 10 = 100

5. ☐ A   ☐ B   ☐ C   ☐ D   ☐ E
6. ☐ A   ☐ B   ☐ C   ☐ D   ☐ E
7. ☐ A   ☐ B   ☐ C   ☐ D   ☐ E
8. ☐ A   ☐ B   ☐ C   ☐ D   ☐ E
9. ☐ A   ☐ B   ☐ C   ☐ D   ☐ E
10. ☐ A   ☐ B   ☐ C   ☐ D   ☐ E

1

1. ☐ A   ☐ B   ☐ C   ☐ D   ☐ E
2. ☐ A   ☐ B   ☐ C   ☐ D   ☐ E

2

3. ☐ A   ☐ B   ☐ C   ☐ D   ☐ E
4. ☐ A   ☐ B   ☐ C   ☐ D   ☐ E
5. ☐ A   ☐ B   ☐ C   ☐ D   ☐ E
6. ☐ A   ☐ B   ☐ C   ☐ D   ☐ E
7. ☐ A   ☐ B   ☐ C   ☐ D   ☐ E

1000 ÷ 10 = 100

8. ☐ A   ☐ B   ☐ C   ☐ D   ☐ E
9. ☐ A   ☐ B   ☐ C   ☐ D   ☐ E
10. ☐ A   ☐ B   ☐ C   ☐ D   ☐ E

$$4 \times 10 = 40$$

$$4 \times 8 = 32$$

$$4 \times 6 = 24$$

$$4 \times 4 = 16$$

$$4 \times 2 = 8$$

$$4 \times 1 = 4$$

$$4 \times 0 = 0$$

$$4 \times 10 = 40$$

$$4 \times 8 = 32$$

$$4 \times 6 = 24$$

$$4 \times 4 = 16$$

$$4 \times 2 = 8$$

$$4 \times 1 = 4$$

$$4 \times 0 = 0$$

$$4 \times 10 = 40$$

$$4 \times 8 = 32$$

$$4 \times 6 = 24$$

$$4 \times 4 = 16$$

$$4 \times 2 = 8$$

$$4 \times 1 = 4$$

$$4 \times 0 = 0$$

$$4 \times 10 = 40$$

$$4 \times 8 = 32$$

$$4 \times 6 = 24$$

$$4 \times 4 = 16$$

$$4 \times 2 = 8$$

$$4 \times 1 = 4$$

$$4 \times 0 = 0$$

$$4 \times 10 = 40$$

$$4 \times 8 = 32$$

$$4 \times 6 = 24$$

$$4 \times 4 = 16$$

$$4 \times 2 = 8$$

$$4 \times 1 = 4$$

$$4 \times 0 = 0$$

$$4 \times 10 = 40$$

$$4 \times 8 = 32$$

$$4 \times 6 = 24$$

$$4 \times 4 = 16$$

$$4 \times 2 = 8$$

$$4 \times 1 = 4$$

$$4 \times 0 = 0$$

$$4 \times 10 = 40$$

$$4 \times 8 = 32$$

$$4 \times 6 = 24$$

$$4 \times 4 = 16$$

$$4 \times 2 = 8$$

$$4 \times 1 = 4$$

$$4 \times 0 = 0$$

$$4 \times 10 = 40$$

$$4 \times 8 = 32$$

$$4 \times 6 = 24$$

$$4 \times 4 = 16$$

$$4 \times 2 = 8$$

$$4 \times 1 = 4$$

$$4 \times 0 = 0$$

$$4 \times 10 = 40$$

$$4 \times 8 = 32$$

$$4 \times 6 = 24$$

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$$4 \times 2 = 8$$

$$4 \times 1 = 4$$

$$4 \times 0 = 0$$

$$4 \times 10 = 40$$

$$4 \times 8 = 32$$

$$4 \times 6 = 24$$

$$4 \times 4 = 16$$

$$4 \times 2 = 8$$

$$4 \times 1 = 4$$

$$4 \times 0 = 0$$

$$4 \times 10 = 40$$

$$4 \times 8 = 32$$

$$4 \times 6 = 24$$

$$4 \times 4 = 16$$

$$4 \times 2 = 8$$

$$4 \times 1 = 4$$

$$4 \times 0 = 0$$

$$4 \times 10 = 40$$

$$4 \times 8 = 32$$

$$4 \times 6 = 24$$

$$4 \times 4 = 16$$

$$4 \times 2 = 8$$

$$4 \times 1 = 4$$

$$4 \times 0 = 0$$

$$4 \times 10 = 40$$

$$4 \times 8 = 32$$

$$4 \times 6 = 24$$

$$4 \times 4 = 16$$

$$4 \times 2 = 8$$

$$4 \times 1 = 4$$

$$4 \times 0 = 0$$

$$4 \times 10 = 40$$

$$4 \times 8 = 32$$

$$4 \times 6 = 24$$

$$4 \times 4 = 16$$

$$4 \times 2 = 8$$

$$4 \times 1 = 4$$

$$4 \times 0 = 0$$

$$4 \times 10 = 40$$

$$4 \times 8 = 32$$

$$4 \times 6 = 24$$

$$4 \times 4 = 16$$

$$4 \times 2 = 8$$

$$4 \times 1 = 4$$

$$4 \times 0 = 0$$

$$4 \times 10 = 40$$

$$4 \times 8 = 32$$

$$4 \times 6 = 24$$

$$4 \times 4 = 16$$

$$4 \times 2 = 8$$

$$4 \times 1 = 4$$

$$4 \times 0 = 0$$



# Grade 4

1. 100

2. 1000

3. 100

4. 1000

5. 100

6. 100

7

8. 100

9. 1000

10



10:10



10:20



10:30



10:40

11

12. 1000

13

14. 1000

15

16. 1000

17. 1000



## Lesson 8

### Division Applications on Division

1

2. 100

3. 100

4. 100

5. 100

6. 100

7. 100

8. 100

9. 100

10

11. 100

12. 100

13. 100

14. 100

15. 100

16. 100

17. 100

18. 100

19. 100



POMT Math Prep & Test

## Lesson 10

### The Relation Between Multiplication and Division

1

2. 100

3. 100

4. 100

5. 100

6

7. 100

8. 100

9. 100

10. 100

11. 100

12. 100

13. 100

14. 100

15. 100

16. 100

17. 100

18. 100

19

20. 100

21. 100

22. 100

23. 100

24. 100

25. 100

26. 100

27. 100

28. 100

29

30. 100

31. 100

32. 100

33. 100

34. 100

35. 100

36. 100

37. 100

38. 100

39

40. 100

41. 100

42. 100

43. 100

44. 100

45. 100

46. 100

47. 100

48. 100

49. 100

50

51. 100

52. 100

53. 100

54. 100

55. 100

56. 100

57. 100

58. 100

59. 100

60. 100

## Chapter 4

### Lesson 1

#### Polygons

1

2. 100

3. 100

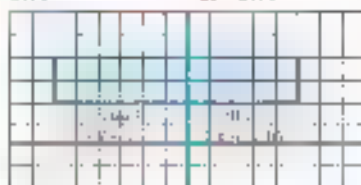


## Grade Answers

**2**

$$12 = 3 \times 4$$

$$10 = 2 \times 5$$



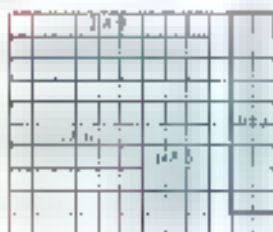
**3**

$$6 = 3 \times 2$$

$$8 = 4 \times 2$$

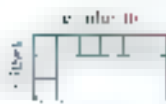
$$8 = 4 \times 2$$

$$12 = 3 \times 4$$



**4**

**A**



The Area =  $3 \times 4$   
= 12 units

**B**



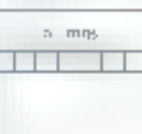
The Area =  $3 \times 4$   
= 12 units

**C**



The Area =  $3 \times 4$   
= 12 units

**D**



The Area =  $3 \times 4$   
= 12 units

## Lessons 5&7

### Area by Splitting Arrays Distributive Property on Multiplication

**1**

$$6 \times 5 = 30 \quad 14 \times 40$$

$$6 \times (3 \times 4) = (6 \times 3) + (6 \times 4) = 18 + 24 = 42$$

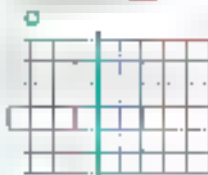


POINT Math Price Is Right Time

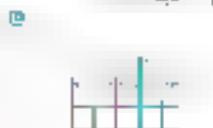
**2**



**3**



$$10 \times 4 = 40 \quad 10 \times 6 = 60$$



$$20 \times 3 = 60 \quad 20 \times 4 = 80$$

**4**

$$6 \times 5 = 30 \quad 14 \times 40 = 560 \quad 6 \times 5 = 30 \quad 14 \times 40 = 560$$

$$6 \times 5 = 30 \quad 14 \times 40 = 560 \quad 6 \times 5 = 30 \quad 14 \times 40 = 560$$

$$6 \times 5 = 30 \quad 14 \times 40 = 560 \quad 6 \times 5 = 30 \quad 14 \times 40 = 560$$

**5**

$$6 \times 5 = 30 \quad 14 \times 40 = 560 \quad 6 \times 5 = 30 \quad 14 \times 40 = 560$$

$$6 \times 5 = 30 \quad 14 \times 40 = 560 \quad 6 \times 5 = 30 \quad 14 \times 40 = 560$$

$$6 \times 5 = 30 \quad 14 \times 40 = 560 \quad 6 \times 5 = 30 \quad 14 \times 40 = 560$$

$$6 \times 5 = 30 \quad 14 \times 40 = 560 \quad 6 \times 5 = 30 \quad 14 \times 40 = 560$$

$$6 \times 5 = 30 \quad 14 \times 40 = 560 \quad 6 \times 5 = 30 \quad 14 \times 40 = 560$$

$$6 \times 5 = 30 \quad 14 \times 40 = 560 \quad 6 \times 5 = 30 \quad 14 \times 40 = 560$$

**6**

$$6 \times 5 = 30 \quad 14 \times 40 = 560 \quad 6 \times 5 = 30 \quad 14 \times 40 = 560$$

$$6 \times 5 = 30 \quad 14 \times 40 = 560 \quad 6 \times 5 = 30 \quad 14 \times 40 = 560$$

$$6 \times 5 = 30 \quad 14 \times 40 = 560 \quad 6 \times 5 = 30 \quad 14 \times 40 = 560$$

## Chapter 5

### Lesson 1

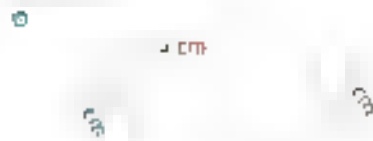
#### Perimeter of Polygons

**1**

$$6 \times 5 = 30 \quad 14 \times 40 = 560 \quad 6 \times 5 = 30 \quad 14 \times 40 = 560$$

$$6 \times 5 = 30 \quad 14 \times 40 = 560 \quad 6 \times 5 = 30 \quad 14 \times 40 = 560$$

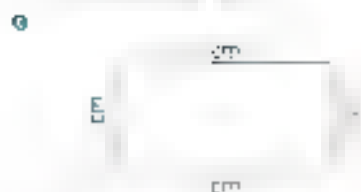
2



Perimeter =  $2 \times (4 + 3) = 14$  cm



Perimeter =  $2 \times (5 + 4) = 18$  cm



Perimeter =  $2 \times (6 + 5) = 22$  cm



Perimeter =  $4 \times 3 = 12$  cm

## Lessons 2-4

Perimeter and Area - Area Using the Dimensions Area Using Different Strategies

1

Area =  $3 \times 5 = 15$  square units

Perimeter =  $2 \times (3 + 5) = 16$  length units

Area =  $3 \times 5 = 15$  square units

Perimeter =  $2 \times (3 + 5) = 16$  length units

2

Steps	Dimension	Area
1	3 length units	square units
2	6 length units	$3 \times 6 = 18$ square units
3	9 length units	$3 \times 9 = 27$ square units
4	12 length units	square units
5	15 length units	5 square units
6	18 length units	$3 \times 6 = 18$ square units

3

Fig Shape	First Strategy	Second Strategy
	$2 \times 3 = 6$ Area = 6 square units	$2 \times 3 = 6$ Area = 6 square units
	$3 \times 3 = 9$ Area = 9 square units	$3 \times 3 = 9$ Area = 9 square units
	$4 \times 3 = 12$ Area = 12 square units	$4 \times 3 = 12$ Area = 12 square units
	$5 \times 3 = 15$ Area = 15 square units	$5 \times 3 = 15$ Area = 15 square units

4

1.  $3 \times 4 = 12$  square units

2.  $3 \times 4 = 12$  square units

Final:

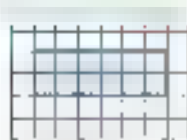
## Grade Answers

### Lessons 5&6

Different Perimeters for the Same Area  
Different Areas for the Same Perimeter

**1**

**A**



Area = 12 square units

Perimeter = 14 length units



Area = 12 square units

Perimeter = 14 length units

**B**



Area = 16 square units

Perimeter = 16 length units



Area = 15 square units

Perimeter = 16 length units

**C**



Area = 15 square units

Perimeter = 16 length units



Area = 16 square units

Perimeter = 16 length units

**2**

**A**



Area = 12 square units

Perimeter = 14 length units



Area = 12 square units

Perimeter = 14 length units

**B**



Area = 16 square units

Perimeter = 16 length units



Area = 15 square units

Perimeter = 16 length units

**C**



Area = 12 square units

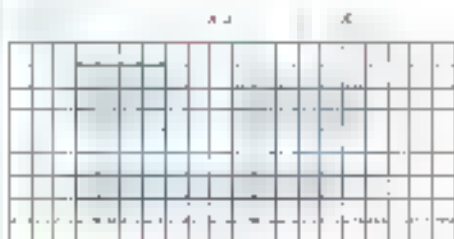
Perimeter = 14 length units



Area = 12 square units

Perimeter = 14 length units

**3**



**4**



### Lesson 7

Applications on Perimeter and Area

**1**

Perimeter = 4 length units      Area = 4 square units

**2**

The area of the border = 5 - 4 = 1

**3**

The length of the wooden frame = 4 + 4 = 8 inches

**4**

The area = 5 x 6 = 30 square units

# Lesson 8

## Multiplying by Multiples of 10

1

- ☐ A. 50  $\times 10 = 500$
- ☐ B.  $5 \times 10 = 50$
- ☐ C.  $10 \times 10 = 100$
- ☐ D.  $50 \times 10 = 500$
- ☐ E.  $5 \times 10 = 50$

2

- ☐ A.  $5 \times 10 = 50$
- ☐ B.  $5 \times 10 = 500$
- ☐ C.  $5 \times 10 = 50$
- ☐ D.  $5 \times 10 = 500$
- ☐ E.  $5 \times 10 = 50$

3

- ☐ A.  $5 \times 10 = 50$
- ☐ B.  $5 \times 10 = 500$
- ☐ C.  $5 \times 10 = 50$
- ☐ D.  $5 \times 10 = 500$
- ☐ E.  $5 \times 10 = 50$

# Chapter 6

## Lesson 1

### Patterns of Multiplying by Multiples of 10

1

- ☐ A.  $5 \times 10 = 50$
- ☐ B.  $5 \times 10 = 500$
- ☐ C.  $5 \times 10 = 50$
- ☐ D.  $5 \times 10 = 500$

2

- ☐ A.  $5 \times 10 = 50$
- ☐ B.  $5 \times 10 = 500$
- ☐ C.  $5 \times 10 = 50$
- ☐ D.  $5 \times 10 = 500$

3

- ☐ A.  $5 \times 10 = 50$
- ☐ B.  $5 \times 10 = 500$
- ☐ C.  $5 \times 10 = 50$
- ☐ D.  $5 \times 10 = 500$

## Lesson 2

### Strategies of Multiplying by 9

1

- ☐ A.  $9 \times 4 = 36$
- ☐ B.  $9 \times 5 = 45$
- ☐ C.  $9 \times 6 = 54$

2

- ☐ A.  $9 \times 4 = 36$
- ☐ B.  $9 \times 5 = 45$
- ☐ C.  $9 \times 6 = 54$

- ☐ A.  $9 \times 4 = 36$
- ☐ B.  $9 \times 5 = 45$
- ☐ C.  $9 \times 6 = 54$

- ☐ A.  $9 \times 4 = 36$
- ☐ B.  $9 \times 5 = 45$
- ☐ C.  $9 \times 6 = 54$

- ☐ A.  $9 \times 4 = 36$
- ☐ B.  $9 \times 5 = 45$
- ☐ C.  $9 \times 6 = 54$

3

- ☐ A.  $9 \times 4 = 36$
- ☐ B.  $9 \times 5 = 45$
- ☐ C.  $9 \times 6 = 54$

4

- ☐ A.  $9 \times 4 = 36$
- ☐ B.  $9 \times 5 = 45$
- ☐ C.  $9 \times 6 = 54$

## Lesson 3

### Facts on Multiplication and Addition

1

- ☐ A.  $5 \times 10 = 50$
- ☐ B.  $5 \times 10 = 500$
- ☐ C.  $5 \times 10 = 50$
- ☐ D.  $5 \times 10 = 500$



## Grade Answers

2

- 
- A 4x4 grid of 16 icons representing various mathematical and scientific concepts. The icons include symbols for pi, infinity, percent, hash, equals, less than or equal to, greater than or equal to, plus, minus, multiplication, division, square root, cube root, power, and various geometric shapes like a circle, triangle, and square.

3

- 

25507 4

## Comparing and Ordering Numbers in Different Forms

1

- [illegible]

(4) **POINT** Month Price, \$1 First Term







4

	The Number	The Place Value of the Underlined Digit	The Value of the Underlined Digit
1	55,389	4 (under 3) — 3 tens	400,000
2	30,7512	5 (under 1) — 1 ones	50,000
3	n/a		
4	486,274	7 (under 7) — 7 tens	70
5	51,780	7 (under 7) — 7 ones	0
6	98,424	4 (under 4) — 4 hundreds	400

3

- 0 3 5 0 4 7 5
- The largest number 75,000
- The smallest number 0
- 0 3 5 4
- The largest digit number 5430
- The smallest digit number 0345

4

- 






## Lesson 5

### Addition Strategies



2

**Hundreds** **Tens** **Ones**

**Hundreds** **Tens** **Ones**

56

418

Problem	Work Space	Sum
1	$\begin{array}{r} 200 \\ + 10 \\ \hline 210 \end{array}$	210
2	$\begin{array}{r} 50 \\ + 30 \\ \hline 80 \end{array}$	80
3	$\begin{array}{r} 500 \\ + 100 \\ \hline 600 \end{array}$	600
4	$\begin{array}{r} 200 \\ + 100 \\ \hline 300 \end{array}$	300

3

**Hundreds** **Tens** **Ones**

**Hundreds** **Tens** **Ones**

48

5

Problem	Work Space	Sum
1	$\begin{array}{r} 100 \\ + 100 \\ \hline 200 \end{array}$	200
2	$\begin{array}{r} 100 \\ + 100 \\ \hline 200 \end{array}$	200
3	$\begin{array}{r} 100 \\ + 100 \\ \hline 200 \end{array}$	200
4	$\begin{array}{r} 100 \\ + 100 \\ \hline 200 \end{array}$	200

Lesson 8

Subtraction Strategies

1

**Hundreds** **Tens** **Ones**

**Hundreds** **Tens** **Ones**

54

55

**Hundreds** **Tens** **Ones**

54

55

## Grade 4 Math

1.  $4.00 - 0.00 =$

Thousands

Tens

Ones



Check:  $4.00 - 0.00 =$

2.  $4.00 - 0.00 =$

Thousands

Hundreds

Tens

Ones



Check:  $4.00 - 0.00 =$

3.  $4.00 - 0.00 =$

Thousands

Hundreds

Tens

Ones



Check:  $4.00 - 0.00 =$

2

Subtraction Problem		Check
<p>a. <math>4.00 - 0.00 =</math></p>	<p><math>4.00 - 0.00 =</math></p>	<p><math>4.00 - 0.00 =</math></p>
<p>b. <math>4.00 - 0.00 =</math></p>	<p><math>4.00 - 0.00 =</math></p>	<p><math>4.00 - 0.00 =</math></p>
<p>c. <math>4.00 - 0.00 =</math></p>	<p><math>4.00 - 0.00 =</math></p>	<p><math>4.00 - 0.00 =</math></p>



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## Lesson 7

### Applications on Addition and Subtraction

1

$4.00 - 0.00 =$

$4.00 - 0.00 =$

$4.00 - 0.00 =$

$4.00 - 0.00 =$

2

$4.00 - 0.00 =$

3

$4.00 - 0.00 =$

$4.00 - 0.00 =$

4

$4.00 - 0.00 =$

## Lessons 8&9

### Capacity Reading Capacity)

1



2



3

$4.00 - 0.00 =$

$4.00 - 0.00 =$

$4.00 - 0.00 =$

$4.00 - 0.00 =$

$4.00 - 0.00 =$

$4.00 - 0.00 =$

$4.00 - 0.00 =$

$4.00 - 0.00 =$

4

$4.00 - 0.00 =$

$4.00 - 0.00 =$

$4.00 - 0.00 =$

$4.00 - 0.00 =$

$4.00 - 0.00 =$

$4.00 - 0.00 =$

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$4.00 - 0.00 =$

$4.00 - 0.00 =$

$4.00 - 0.00 =$

$4.00 - 0.00 =$

5

$4.00 - 0.00 =$

$4.00 - 0.00 =$

174

Only

MEAT

EXERCISES  
FINAL REVISION  
& DRAMA

3

PRIMARY  
FIRST TERM



# Chapter 1

## Lesson 1 Patterns

1 Match each number pattern with the appropriate rule:

- |                           |  |             |
|---------------------------|--|-------------|
| A 2 4 6 8 10 12 .....     |  | +3 <b>1</b> |
| B 3 6 9 12 15             |  | +5 <b>2</b> |
| C 45 40 35 30 25 .....    |  | +2 <b>3</b> |
| D 48 44 40 36 32 28 ..... |  | 9 <b>4</b>  |
| E 2 7 12 17 22 27         |  | 4 <b>5</b>  |
| F 81 72 63 54 45 .....    |  | +5 <b>6</b> |

2 Match each visual pattern with the appropriate rule:

- |   |  |          |
|---|--|----------|
| A |  | <b>1</b> |
| B |  | <b>2</b> |
| C |  | <b>3</b> |
| D |  | <b>4</b> |
| E |  | <b>5</b> |
| F |  | <b>6</b> |



b



1



4



9



16



25

c



3



6



10



15



21

d



1



3



6



10



15

e



1



2



4



8



16

5 Find out the pattern, then complete in the same sequence

									Rule
<input type="radio"/> A	12	13	14	15	16	17	18	19	+1
<input type="radio"/> B	45	44	43	42	41	40	39	38	1
<input type="radio"/> C	22	24	26	28	30	32	34	36	+2
<input type="radio"/> D	68	66	64	62	60	58	56	54	-2
<input type="radio"/> E	10	13	16	19	22	25	28	31	+3
<input type="radio"/> F	50	47	44	41	38	35	32	29	3
<input type="radio"/> G	5	10	15	20	25	30	35	40	+5
<input type="radio"/> H	100	95	90	85	80	75	70	65	5
<input type="radio"/> I	0	10	20	30	40	50	60	70	+10
<input type="radio"/> J	90	80	70	60	50	40	30	20	10

6 Find out the pattern, then complete in the same sequence

- ☐ A 1, 2, 4, 7, 11, 16, 22, 29, 37, 46
- ☐ B 1, 2, 4, 8, 16, 32, 64, 128, 256
- ☐ C 1, 1, 2, 3, 5, 8, 13, 21, 34



# Accumulative Assessment

1



## Chapter 4

**First:** Choose the correct answer:

- a Thirty five in digits = 30 ☐ 35 ☒ 3
- b 3 Hundreds + 5 Tens + 2 Ones = 352 ☐ 253 ☐ 532  
 $30 + 50 =$  35 ☐ 53 ☒ 80
- c 10 Tens =                      Hundreds 100 ☐ 10 ☐ 11
- d The number **after** 29 is 28 ☐ 30 ☒ 29

**Second:** Complete the following

- a 5 Ones + 7 Tens = **75**
- b The **smallest** 2 digit number is **10**
- c The **value** of the digit 5 in 58 is **50**
- d The **greatest** number formed from the digits 5 and 8 is **85**
- e) 20, 25, 30, 35, **40**, **45**, **50**

**Third:** Answer the following:

- a Find out the pattern, then complete in the same pattern.



- b Find the result

① $215 + 123 =$ <b>338</b>	⑧ $\frac{1}{5}$	④ $15$
② $750 - 120 =$ <b>630</b>	⑤ $\frac{1}{12}$	$- 9$
		<b>4</b>





Eman has 125.L.E and Nada has 215.L.E  
 How much money do they have altogether?

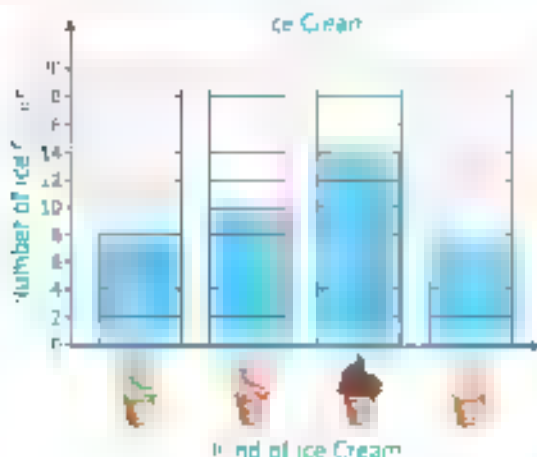
$$125 + 215 = 340$$

# Lesson 2 More of Bar Graphs

- 1 The following ice cream pieces show the store's sales, make a tally table to count the ice cream pieces, then complete the bar graph.



Ice Cream				
Tally Marks				
Number	8	10	14	7

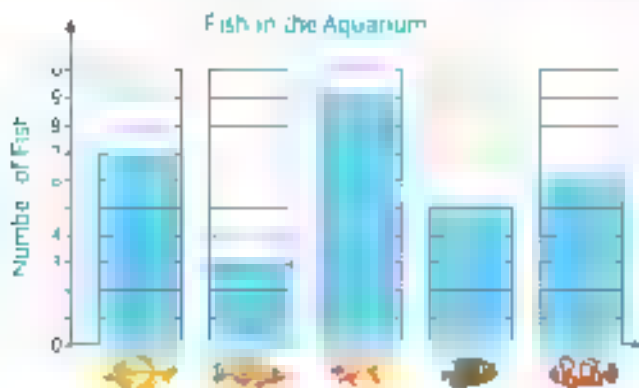


- 2 There are different fish in the aquarium.

Complete the following tally table to count the fish, then complete the bar graph.

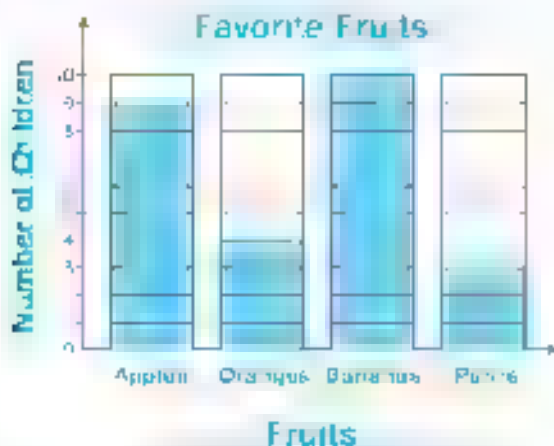


Fish					
Tally Marks					
Number	7	3	9	5	6



- 3 These are the favorite fruits of a number of children. Use the following table to complete the bar graph.

Favorite Fruit	Tally	Number of Children
Apple 		9
Orange 		4
Banana 		10
Pear 		3

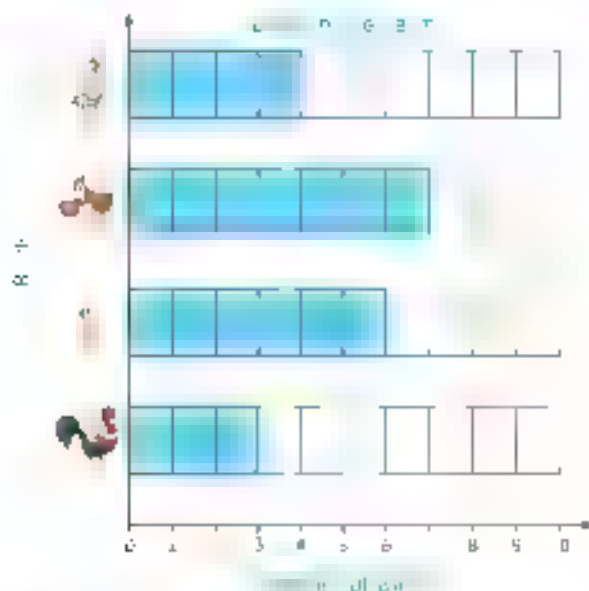


- ☐ How many children liked apple?
- 9
- ☐ How many children liked apple and banana?
- $3 + 10 = 13$
- ☒ Which fruit is liked the most?
- bananas
- ☐ Which fruit is liked the least?
- pears

- 4 The following picture shows the number of birds in a farm.  
Make a tally table to count them, then complete the bar graph



Birds				
Number of Birds	3	6	7	4



# Accumulative Assessment 2

## Chapter 1

**First:** Choose the correct answer

a The **greatest** 2-digit number is

☐ a  $5 + 30 =$

☐ b  $7 + 0 + 5 =$

☐ c  $45 + 23 =$

d The **value** of the digit 5 in 75 is

$90$  ☐ a  $99$  ☐ b  $10$

$(53)$  ☐ c  $80$  ☐ d  $(35)$

$(705)$  ☐ e  $75$  ☐ f  $(12)$

$(58)$  ☐ g  $86$  ☐ h  $77$

$5$  ☐ i  $50$  ☐ j  $500$

**Second:** Complete the following

a The number that comes **just after** 39 is **40**

☐ b  $98 - 36 =$  **62**

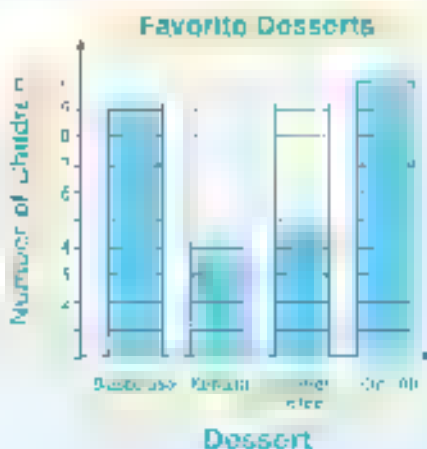
☐ c  $35 +$  **44**  $= 79$

d

$\leq 10$   $20$   $30$   $40$  **50**  $60$   $70$

**Third:** These are the **favorite** **desserts** of a number of children.  
Use the following **table** to complete the **bar graph**

Favorite Dessert	Tallies	Number of Children
Basbousa		9
Kunafa		4
Sweet Feteer		5
Om Ali		10



# Lesson 3 Line Plot

- 1 The following numbers are the results of a test taken by a class of 24 students

18 12 13 16 17 17 13 17  
16 14 11 18 14 19 11 17  
21 21 22 18 11 16 15 14

- Ⓐ The lowest mark: 11  
Ⓑ The greatest mark: 22  
Ⓒ The number of times each mark is repeated

Marks	11	12	13	14	15	16	17	18	19	20	21	22
Frequency	3	1	2	3	1	3	4	3	1	0	2	1

- Ⓓ The line plot:

Test Results



1 = 1 student

## 2 Create a line plot using eggs in the basket data.

Make sure to give your line plot a title and a key


☐ The lowest value      20      ☒ The greatest value      28

☒ The number of times each number is repeated:

Number of Eggs	20	21	22	23	24	25	26	27	28
Frequency	3	3	3	2	0	5	0	1	1

☒ The line plot:


x = 1 basket



- 3 The following data shows the weights of 20 children in kilograms. Create a line plot using this data

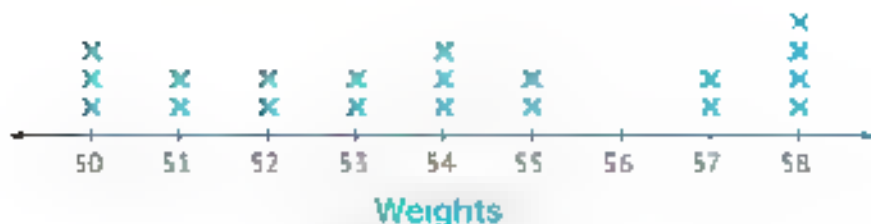
55 50 54 54 51 55 52 53 57 58  
58 58 58 54 53 57 51 50 50 52

- Ⓐ The lowest value: 50  
Ⓑ The greatest value: 58  
Ⓒ The number of times each number is repeated:

Weight	50	51	52	53	54	55	56	57	58
Frequency	3	2	2	2	3	2	0	2	4

- Ⓓ The line plot.

Children's Weights



x = 1 child

- 4 The following data shows the number of students in each of the school's 20 classes. Create a line plot using this data.

45 40 46 45 39 40 41 43 45 38  
44 42 39 43 40 43 38 41 44 39

- Ⓐ The lowest value: **38**
- Ⓑ The greatest value: **46**
- Ⓒ The number of times each number is repeated

Number of Students	38	39	40	41	42	43	44	45	46
Frequency	2	3	3	2	0	3	2	1	1

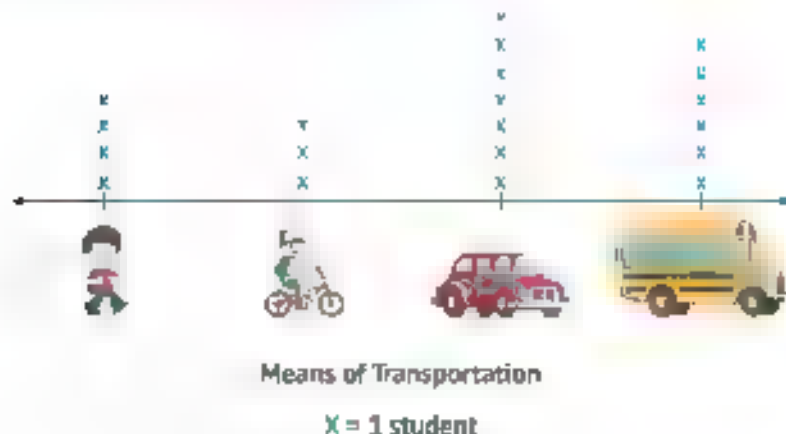
- Ⓓ The line plot

Number of Students in 20 classes



$x =$  **1 class**

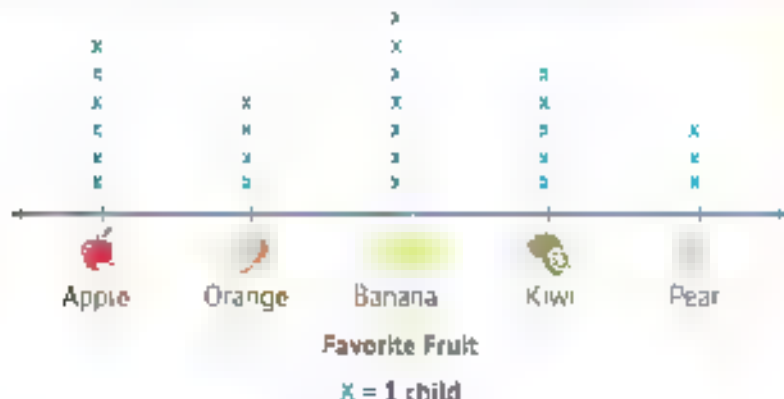
- 5 The following line plot represents the means of transportation used by 20 students to reach school:








Answer the following questions:

- Ⓐ How many students go to school by walking? **6**
- Ⓑ How many students go to school by bicycling? **3**
- Ⓒ How many students go to school by car? **7**
- Ⓓ How many students go to school on a bus? **4**
- Ⓔ What is the most popular mean of transportation for students? **Car**
- Ⓕ How many more students go to school by car than by walking?  **$7 - 6 = 1$**







6 The following line plot shows the favorite fruit for 25 children:



Complete the following table

Favorite Fruit					
	Apple	Orange	Banana	Kiwi	Pear
Number of Children	6	4	7	5	3

Answer the following questions

- Ⓐ How many children liked   ?  
4
- Ⓑ How many more children liked  than  ?  
 $6 - 3 = 3$
- Ⓒ How many children altogether liked  and  ?  
 $5 + 6 + 4 = 15$
- Ⓓ Which fruit is liked the most?  
Bananas
- Ⓔ Which fruit is liked the least?  
Pears

# Accumulative Assessment

## 3



### Chapter 4

**First:** Choose the correct answer:

- a The **smallest** number formed from 5, 1 and 3 is ( 503 ☐ 305 ☒ 350 )
- b  $7 + 20 + 800 =$  ( 728 ☐ 278 ☒ 827 )
- c One hundred and ten = 110 ☒ 101 ☐ 11
- d 380 comes just **after** 581 ☐ 579 ☒ 570
- e The place value of 3 in 534 is Hundreds ☒ Ones ☐ Tens

**Second:** Complete the following

- a The **largest** 3-digit number is **999**
- b The **value** of the digit 0 in 209 is **0**
- c 105, 100, 95, 90, **05**, **00**, **75**
- d 500 = **50** Tens
- e The number that comes just **before** 600 is **599**

**Third:** Answer the following:

a **Find the result**

- ☒  $585 + 315 =$  **900** ☐  $58 + 18 =$  **40**
- ☒  $97 + 16 =$  **113** ☐  $800 + 86 =$  **714**

b **Arrange the following numbers in an ascending order**

**405**, **504**, **450**, **540**, **500**

**405**      **450**      **500**      **504**      **540**

Shimaa had 750 LE she bought a T-shirt for 185 LE

Find the remaining money with her.

The remainder **750** **185** = **565** LE

# **Lessons 4 6** Measuring Lengths in (Centimeter, Meter, and Millimeter)

- 1 See the pictures below. Determine what is the appropriate length unit for measuring these things, then write it under the picture (Millimeter (mm), centimeter (cm) or meter (m)).

1



Meter

2



Centimeter

3



Meter

4



Centimeter

5



Centimeter

6



Meter

7



Meter

8



Centimeter

9



Meter

10



Millimeter

11



Centimeter

12



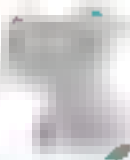
Centimeter

13



Millimeter

14



Meter

15



Centimeter

16



Millimeter

2 Use the ruler to measure the length of each object in centimeters:



7 centimeters



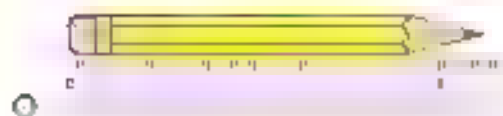
2 centimeters



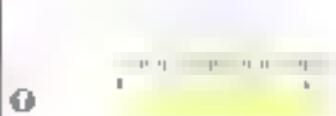
4 centimeters



5 centimeters



9 centimeters



3 centimeters



13 centimeters

3 Use the ruler to measure the length of each of the following in centimeters.

3



Length = 2 cm

3



Length = 5 cm

3



Length = 6 cm

3



Length = 6 cm

3



Length = 5 cm

3



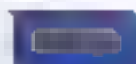
Length = 3 cm

3



Length = 6 cm

3



Length = 3 cm

3



Length = 4 cm

3



Length = 2 cm



## 4 Choose the appropriate length for each of the following

Ⓐ



10 mm 1 cm 10 m

Ⓑ



2 mm 2 cm 2 m

Ⓒ



25 mm 25 cm 25 m

Ⓓ



150 mm 150 cm 150 m

Ⓔ



25 mm 25 cm 25 m

Ⓕ



4 mm 4 cm 4 m

Ⓖ



15 mm 15 cm 15 m

Ⓗ



5 mm 5 cm 5 m

Ⓘ



3 mm 3 cm 3 m

Ⓛ



12 mm 12 cm 12 m

**5 Complete:**

Ⓐ 1 m = 100 cm

Ⓐ 9 m = 900 cm

Ⓑ 2 m = 200 cm

Ⓑ 6 m = 600 cm

Ⓒ 400 cm = 4 m

Ⓒ 300 cm = 3 m

Ⓓ 700 cm = 7 m

Ⓓ 500 cm = 5 m

Ⓔ 8 cm = 80 mm

Ⓔ 1 cm = 10 mm

Ⓕ 12 cm = 120 mm

Ⓕ 10 cm = 100 mm

Ⓖ 50 cm = 500 mm

Ⓖ 54 cm = 540 mm

Ⓗ 600 cm = 6 m

Ⓗ 90 mm = 9 cm

Ⓙ 750 mm = 75 cm

Ⓙ 700 mm = 70 cm

Ⓚ 900 mm = 90 cm

Ⓚ 120 mm = 12 cm

**6 Complete:**

Ⓐ 3 m + 75 cm = 300 cm + 75 cm = 375 cm

Ⓑ 2 m + 20 cm = 200 cm + 20 cm = 220 cm

Ⓒ 5 m + 2 cm = 502 cm

Ⓒ 6 m + 7 cm = 607 cm

Ⓓ 9 m + 45 cm = 945 cm

Ⓓ 4 m + 60 cm = 460 cm

**7 Complete:**

Ⓐ 6 cm + 3 mm = 60 mm + 3 mm = 63 mm

Ⓑ 20 cm + 4 mm = 200 mm + 4 mm = 204 mm

Ⓒ 15 cm + 2 mm = 152 mm

Ⓒ 16 cm + 7 mm = 167 mm

Ⓓ 90 cm + 6 mm = 906 mm

Ⓓ 10 cm + 8 mm = 108 mm

### 8 Complete:

$$\textcircled{a} 245 \text{ cm} = 2 \text{ m} + 45 \text{ cm}$$

$$\textcircled{b} 372 \text{ cm} = 3 \text{ m} + 72 \text{ cm}$$

$$\textcircled{c} 750 \text{ cm} = 7 \text{ m} + 50 \text{ cm}$$

$$\textcircled{d} 140 \text{ cm} = 1 \text{ m} + 40 \text{ cm}$$

$$\textcircled{e} 803 \text{ cm} = 8 \text{ m} + 3 \text{ cm}$$

$$\textcircled{f} 402 \text{ cm} = 4 \text{ m} + 2 \text{ cm}$$

### 9 Complete:

$$\textcircled{a} 24 \text{ mm} = 2 \text{ cm} + 4 \text{ mm}$$

$$\textcircled{b} 72 \text{ mm} = 7 \text{ cm} + 2 \text{ mm}$$

$$\textcircled{c} 102 \text{ mm} = 10 \text{ cm} + 2 \text{ mm}$$

$$\textcircled{d} 607 \text{ mm} = 60 \text{ cm} + 7 \text{ mm}$$

$$\textcircled{e} 617 \text{ mm} = 61 \text{ cm} + 7 \text{ mm}$$

$$\textcircled{f} 425 \text{ mm} = 42 \text{ cm} + 5 \text{ mm}$$

### 10 Measure the side lengths using the ruler



5 cm



4 cm



2 cm

# Accumulative Assessment

4

## Chapter 10

**First:** Choose the correct answer

- a  $10\text{ cm} + 5\text{ mm} =$  mm  
 b  $1.5\text{ m} =$  cm  
 c  $5 + 0 + 6 =$   
 d The number that comes just **after** 309 is  
 e The **largest** 3-different digit number is
- 105 @ 15 @ 1 005  
 15 @ 150 @ 1 500  
 56 @ 506 @ 1  
 310 @ 301 @ 319  
 999 @ 987 @ 102

**Second:** Complete the following

- a  $205\text{ cm} =$  2 m + 5 cm  
 b  $204 =$  2 Hundreds + 0 Tens + 4 Ones  
 c The **value** of the digit 0 in 301 is 0  
 d Two hundred two in digits, 202



**Third:** Answer the following:

a Find the result:

①  $859 + 41 =$  900      ②  $700 - 25 =$  675

b Complete using (<, = or >)

①  $50\text{ m} + 25\text{ cm}$  > 525 cm    ② 666 > 499  
 ③  $8\text{ cm} + 5\text{ mm}$  < 805 cm    ④ 182 < 427

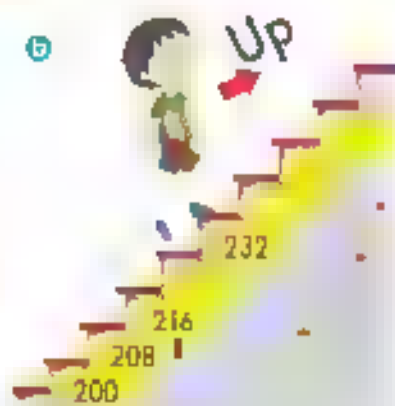
Arrange the following lengths in an ascending order:

5 cm , 50 m , 500 mm , 550 cm

5cm      500mm      550cm      50m

# PUZZLE

1 Complete the pattern



2 Match each measurement to its suitable length



50cm<sup>1</sup>

4m<sup>2</sup>

8m<sup>3</sup>

Answers





## 1-4 Thousands, Ten Thousands, and Hundred Thousands - Numbers in Different Forms

### 1 Write the number shown on the figure

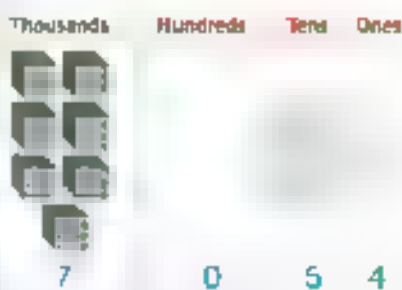
1



Standard Form: 9,999

Word Form: Nine thousand, nine hundred and ninety-nine

2



Standard Form: 7,054

Word Form: Seven thousand, fifty-four

3



Standard Form: 1,307

Word Form: One thousand, three hundred seven

4



Standard Form: 5,816

Word Form: Five thousand, eight hundred sixteen

⑦

Thousands			Hundreds Tens Ones		
Hundreds	Tens	Ones	Hundreds	Tens	Ones
		6	7	5	2

Standard Form: 6 752

Word Form: Six thousand, seven hundred fifty-two

⑧

Thousands			Hundreds Tens Ones		
Hundreds	Tens	Ones	Hundreds	Tens	Ones
		4	9	2	4

Standard Form: 4 924

Word Form: Four thousand, nine hundred twenty-four

⑨

Thousands			Hundreds Tens Ones		
Hundreds	Tens	Ones	Hundreds	Tens	Ones
4	0		7	1	8

Standard Form: 40,718

Word Form: Forty thousand, seven hundred eighteen

⑩

Thousands			Hundreds Tens Ones		
Hundreds	Tens	Ones	Hundreds	Tens	Ones
2	9		1	0	4

Standard Form: 29 104

Word Form: Twenty-nine thousand, one hundred four

⑪

Thousands			Hundreds Tens Ones		
Hundreds	Tens	Ones	Hundreds	Tens	Ones
3	0		0	0	8

Standard Form: 30 008

Word Form: Thirty thousand, eight

⑫

Thousands			Hundreds Tens Ones		
Hundreds	Tens	Ones	Hundreds	Tens	Ones
9	2	0	5	1	2

Standard Form: 920 512

Word Form: Nine hundred, twenty thousand, five hundred twelve

⑬

Thousands			Hundreds Tens Ones		
Hundreds	Tens	Ones	Hundreds	Tens	Ones
2	7	5	1	1	2

Standard Form: 275 112

Word Form: Two hundred seventy-five thousand, one hundred twelve

⑭

Thousands			Hundreds Tens Ones		
Hundreds	Tens	Ones	Hundreds	Tens	Ones
6	5	0	4	7	5

Standard Form: 650 475

Word Form: Six hundred fifty thousand, four hundred seventy-five

## 2 Complete the following:

a

Thousands			Hundreds Tens Ones		
Hundreds	Tens	Ones			
3	1	5	0		

Standard Form **3,150**Word Form: **Three thousand one hundred fifty**

b

Thousands			Hundreds Tens Ones		
Hundreds	Tens	Ones			
4	2	5	7		

Standard Form **4,257**Word Form: **Four thousand, two hundred fifty seven**

c

Thousands			Hundreds Tens Ones		
Hundreds	Tens	Ones			
8	0	0	7	6	

Standard Form **80,076**Word Form: **Eighty thousand, seventy six**

d

Thousands			Hundreds Tens Ones		
Hundreds	Tens	Ones			
3	5	9	1	6	

Standard Form **35,916**Word Form: **Thirty-five thousand, nine hundred sixteen**

e

Thousands			Hundreds Tens Ones		
Hundreds	Tens	Ones			
1	0	5	0	1	5

Standard Form **105,015**Word Form: **One hundred five thousand fifteen**

f

Thousands			Hundreds Tens Ones		
Hundreds	Tens	Ones			
8	2	5	4	0	6

Standard Form **825,406**Word Form: **Eight hundred twenty-five thousand, four hundred six**

g

Thousands			Hundreds Tens Ones		
Hundreds	Tens	Ones			
2	1	9	4	7	1

Standard Form **219,471**Word Form: **Two hundred nineteen thousand, four hundred seventy-one**







h

Thousands			Hundreds Tens Ones		
Hundreds	Tens	Ones			
9	0	9	9	9	0







Standard Form **909,990**Word Form: **Nine hundred, nine thousand, nine hundred ninety**



## 3 Match:

- |                                      |   |          |
|--------------------------------------|---|----------|
| Ⓐ Fifty thousand, fifty five         |  | 50,505 1 |
| Ⓑ Fifty thousand, five hundred five  |  | 55,005 2 |
| Ⓒ Fifty thousand, five hundred fifty |  | 50,055 3 |
| Ⓓ Fifty-five thousand, five          |  | 55,500 4 |
| Ⓔ Fifty-five thousand, fifty         |  | 50,550 5 |
| Ⓕ Fifty-five thousand, five hundred  |  | 55,050 6 |

## 4 Match:

- |                                     |   |           |
|-------------------------------------|---|-----------|
| Ⓐ Two hundred thousand, two         |   | 200,200 1 |
| Ⓑ Two hundred thousand, twenty      |   | 200,002 2 |
| Ⓒ Two hundred thousand, two hundred |  | 202,000 3 |
| Ⓓ Two hundred two thousand          |  | 200,020 4 |
| Ⓔ Two hundred twenty thousand       |  | 222,000 5 |
| Ⓕ Two hundred twenty-two thousand   |  | 220,000 6 |

## 5 Complete the following table:

	Standard Form	Word Form
a	45 125	Forty-five thousand, one hundred twenty-five
b	12,607	Twelve thousand, six hundred seven
c	405 168	Four hundred five thousand, one hundred sixty-eight
d	318 927	Three hundred eighteen thousand, nine hundred twenty-seven
e	26 578	Twenty-six thousand, five hundred seventy-eight
f	13 015	Thirteen thousand and fifteen
g	659 242	Six hundred fifty-nine thousand, two hundred forty-two
h	987 651	Nine hundred eighty-seven thousand, six hundred fifty-one



## 1 The Place Value Chart

1 Write the place value and value of the encircled digit.

Number	Place Value	Value
Ⓐ 1 23 567	Hundred Thousands	100 000
Ⓑ 4 7 2 2 35	Ten Thousands	70 000
Ⓒ 10 2 300	Thousands	2 000
Ⓓ 540 0 89	Hundreds	0
Ⓔ 902 0 0 3	Tens	0
Ⓕ 589 36 8	Ones	8
Ⓖ 7 8 9 112	Ten Thousands	80 000
Ⓗ 967 6 33	Hundreds	600
Ⓘ 752 36 8	Ones	8
Ⓚ 9 12 456	Hundred Thousands	900 000
Ⓛ 25 0 147	Thousands	0
Ⓜ 398 1 1 2	Tens	10

2 Complete the following.

- Ⓐ 20 Thousands = 20 000      Ⓔ 500,000 = 500 Thousands  
 Ⓑ 580 Hundreds = 58 000      Ⓕ 400,000 = 4,000 Hundreds  
 Ⓒ 28 300 Tens = 283 000      Ⓖ 60,000 = 6,000 Tens  
 Ⓓ 25,002 Ones = 25 002      Ⓗ 40,000 = 40 000 Ones  
 Ⓔ 105 Hundreds = 10,500      Ⓚ 60,000 = 600 Hundreds

**3 Complete the following:**

- Ⓐ 5 Thousands = **50** Hundreds    Ⓑ 5 Thousands = **500** Tens  
 Ⓒ 5 Thousands = **5 000** Ones    Ⓓ 50 Thousands = **500** Hundreds  
 Ⓔ 50 Thousands = **5,000** Tens    Ⓕ 50 Thousands = **50 000** Ones  
 Ⓖ 500 Thousands = **5,000** Hundreds    Ⓗ 500 Thousands = **50,000** Tens  
 Ⓘ 70 Hundreds = **7** Thousands    Ⓚ 70 Hundreds = **700** Tens  
 Ⓛ 500 Hundreds = **50** Thousands    Ⓜ 600 Hundreds = **6,000** Tens  
 Ⓝ 9 Hundreds = **90** Tens    Ⓟ 50,000 Tens = **500** Thousands  
 Ⓡ 90,000 Tens = **9 000** Hundreds    Ⓡ 100 Tens = **1** Thousands

**4 Write the following numbers in expanded form**

- Ⓐ 75,825 = **70 000 + 5 000 + 800 + 20 + 5**  
 Ⓑ 561 236 = **500 000 + 60 000 + 1 000 + 200 + 30 + 6**  
 Ⓒ 23,458 = **20 000 + 3 000 + 400 + 50 + 8**  
 Ⓓ 602,803 = **600,000 + 2 000 + 800 + 3**  
 Ⓔ 80,028 = **80,000 + 20 + 8**  
 Ⓛ 900,402 = **900 000 + 400 + 2**  
 Ⓜ 602,000 = **600 000 + 2 000**  
 Ⓡ 202 050 = **200 000 + 2 000 + 50**

**5 Complete:**

- Ⓐ 45,215 = **45** Thousands + **2** Hundreds + **1** Ten + **5** Ones  
 Ⓑ 277,654 = **277** Thousands + **6** Hundreds + **5** Tens + **4** Ones  
 Ⓒ 61 025 = **0** Hundreds + **5** Ones + **2** Tens + **61** Thousands

$$\textcircled{a} 920587 = 7 \text{ Ones} + 5 \text{ Hundreds} + 8 \text{ Tens} + 920 \text{ Thousands}$$

$$\textcircled{b} 500.002 = 500 \text{ Thousands} + 0 \text{ Hundreds} + 0 \text{ Tens} + 2 \text{ Ones}$$

$$\textcircled{c} 62.000 = 62 \text{ Thousands} + 0 \text{ Hundreds} + 0 \text{ Tens} + 0 \text{ Ones}$$

$$\textcircled{d} 780.003 = 780 \text{ Thousands} + 0 \text{ Hundreds} + 0 \text{ Tens} + 3 \text{ Ones}$$

## 6 Complete the following

$$\textcircled{a} 7,000 + 900 + 50 + 7 = 7,957$$

$$\textcircled{b} 50 + 800 + 9,000 + 5 = 9,855$$

$$\textcircled{c} 7,000 + 2 + 40 = 7,042$$

$$\textcircled{d} 400 + 90,000 + 6,000 + 70 + 1 = 96,471$$

$$\textcircled{e} 50 + 4,000 + 200,000 + 90,000 + 7 + 200 = 294,257$$

$$\textcircled{f} 40,000 + 900 = 40,900$$

$$\textcircled{g} 600,000 + 10 + 7 = 600,017$$

$$\textcircled{h} 900,000 + 70,000 = 970,000$$

$$\textcircled{i} 600 + 800,000 = 800,600$$

## 7 Complete:

$$\textcircled{a} 45\,896 = 45 \text{ Thousands} + 8 \text{ Hundreds} + 9 \text{ Tens} + 6 \text{ Ones}$$

$$\textcircled{b} 8\,657 = 8 \text{ Thousands} + 6 \text{ Hundreds} + 5 \text{ Tens} + 7 \text{ Ones}$$

$$\textcircled{c} 935\,742 = 935 \text{ Thousands} + 7 \text{ Hundreds} + 4 \text{ Tens} + 2 \text{ Ones}$$

$$\textcircled{d} 25\,063 = 25 \text{ Thousands} + 6 \text{ Tens} + 3 \text{ Ones}$$

$$\textcircled{e} 56\,087 = 8 \text{ Tens} + 7 \text{ Ones} + 56 \text{ Thousands}$$

$$\textcircled{f} 500\,070 = 500 \text{ Thousands} + 7 \text{ Tens}$$

$$\textcircled{g} 410\,203 = 2 \text{ Hundreds} + 410 \text{ Thousands} + 3 \text{ Ones}$$

T1

Comparing and Ordering Numbers

1 Complete using ( $<$ ,  $=$  or  $>$ ):

$$\textcircled{A} 545,125 < 600,201 \quad \textcircled{B} 788,250 < 788,520$$

$$\textcircled{C} 441,002 < 441,010 \quad \textcircled{D} 99,999 < 100,010$$

$$\textcircled{E} 90,909 < 99,090 \quad \textcircled{F} 5,628 > 5,268$$

$$\textcircled{G} 25,268 > 17,168 \quad \textcircled{H} 6,159 < 6,159$$

$$\textcircled{I} 39,030 < 39,700 \quad \textcircled{J} 6,307 < 60,020$$

$$\textcircled{K} 12,000 > 10,200 \quad \textcircled{L} 77,020 < 77,202$$

$$\textcircled{M} 200,000 + 20,000 + 3,000 + 200 + 10 + 7 = 223,217$$

$$\textcircled{N} 5 + 20 + 300 + 7,000 + 60,000 > 52,376$$

$$\textcircled{O} 255 \text{ Thousands} + 2 \text{ Hundreds} + 7 \text{ Ones} = 255,207$$

$$\textcircled{P} 5 \text{ Tens} + 7 \text{ Thousands} + 4 \text{ Hundreds} > 7,405$$

$$\textcircled{Q} \text{Twenty thousand and twenty} > 2,020$$

$$\textcircled{R} \text{Thirteen thousand, one hundred and three} > 13,013$$

$$\textcircled{S} \text{The largest 5-digit number} > 99,099$$

$$\textcircled{T} \text{The smallest 6-different digit number} < 123,456$$

$$\textcircled{U} 500,000 + 50,000 + 500 + 5 < 555,005$$

$$\textcircled{V} 3,600 + 36 < 360,036$$



- 2 Arrange each group of the following numbers in an ascending order and in a descending order

Ⓐ 45 368 21 789 98 102 78 023 62 034

1 Ascending Order

21,789 45 368 62,034 78,023 98.102

2 Descending Order

98 102 78.023 62 034 45 368 21,789

Ⓑ 12,023 98.123 75.023 54 987 20 368

1 Ascending Order

20 368 32 023 54 987 75 023 98 123

2 Descending Order

98 123 75 023 54 287 32 023 20,368

Ⓒ 500,368 500,638 500.863 500 386 500.683

1 Ascending Order

500 368 500 386 500 638 500 683 500 863

2 Descending Order

500 863 500 683 500,638 500 386 500,368

Ⓓ 700,064 700,406 700,604 700.046 700.460

1 Ascending Order

700 046 700 064 700 406 700,460 700,604

2 Descending Order

700,604 700.460 700,406 700,064 700,046

② 5,023 9,120 5,320 9,012 7,002

1 Ascending Order

5,023 5,320 7,002 9,012 9,120

2 Descending Order

9,120 9,012 7,002 5,320 5,023

③ 166,451 166,154 166,541 166,415 166,145

1 Ascending Order

166,145 166,154 166,415 166,451 166,541

2 Descending Order

166,541 166,451 166,415 166,154 166,145

### 3 Complete the following:

- Ⓐ The **greatest** 4-digit number is **9,999**
- Ⓑ The **greatest** 5-digit number is **99,999**
- Ⓒ The **greatest** 6-digit number is **999,999**
- Ⓓ The **smallest** 4-digit number is **1,000**
- Ⓔ The **smallest** 5-digit number is **10,000**
- Ⓕ The **smallest** 6-digit number is **100,000**
- Ⓖ The **greatest** 4-different-digit number is **9,876**
- Ⓗ The **greatest** 5-different-digit number is **98,765**
- Ⓘ The **greatest** 6-different-digit number is **987,654**
- ⓰ The **smallest** 4-different-digit number is **1,023**
- ⓱ The **smallest** 5-different-digit number is **10,234**
- ⓲ The **smallest** 6-different-digit number is **102,345**
- ⓴ The **smallest** 4-same-digit number is **1,111**
- ⓶ The **smallest** 6-same-digit number is **111,111**





## Chapter 2

- 4 Write the **greatest** and the **smallest** numbers that can be formed from each of the following sets of digits:

Digits	Greatest Number	Smallest Number
Ⓐ 4 3 9 7 5	97 543	34 579
Ⓑ 6 7 3 2 4	76 432	23 467
Ⓒ 5 6 1 3 8 9	986 531	135 689
Ⓓ 9 8 4 5 2 3	985 432	234 589
Ⓔ 6 0 7 9 2	97 620	20 679
Ⓕ 8 7 0 6 3	87 630	30 678
Ⓖ 6 2 0 7 8 5	876 520	205 678
Ⓗ 7 0 6 2 8 1	876 210	102 678

- 5 Write the **greatest** and the **smallest** 5-digit numbers that can be formed from each of the following sets of digits.

Digits	Greatest Number	Smallest Number
Ⓐ 4 and 5	55 554	44 445
Ⓑ 7 3, 4	77 743	33 347
Ⓒ 4 3 7 9	99 731	11 379

- 6 Write the **greatest** and the **smallest** 6-digit numbers that can be formed from each of the following sets of digits.

Digits	Greatest Number	Smallest Number
Ⓐ 9 and 3	999 993	333 339
Ⓑ 5 4 7	777 754	444 457
Ⓒ 2 9 8, 1	999 821	111 289
Ⓓ 8 4 2 7 3	887 432	223 478

## 7 Complete the following table:

	The Number Before	The Number	The Number After
A	325 364	325 365	325,366
B	145,119	145 120	145,121
C	49 999	50,000	50 001
D	636 699	636,700	636 701
E	699 998	700 000	700,000
F	85 099	85 100	85,101
G	9 999	10,000	10 001
H	9 998	9 999	10,000
I	998	999	1,000

## 8 Complete.

- A The number that comes just after 366,258 is 366,259
- B The number that comes just before 155,000 is 154 999
- C 16,000 comes just after 15 999
- D 5,236 comes just after 5 237
- E The number 7,124 comes just after 7123
- F The number 133 021 comes just before 133,022

## First: Choose the correct answer

- a 5 Ones + 3 Hundreds + 74 Thousands + 8 Tens =  
 53,748 ☒ 74,385 ☐ 74,358 ☐
- b Seventy-five thousand and seventy five =  
 75,75 ☐ 75,750 ☒ 75,075 ☐
- c  $500 + 0 + 0 + 3 =$   
 50,003 ☐ 503 ☐ 53 ☐
- d 1,000 Hundreds =  
 100,000 ☐ 1,000 ☐ 10 ☐
- e Eighty five thousand and eight =  
 85,080 ☐ 8,508 ☐ 85,008 ☐

## Second: Complete the following:

- a The place value of 7 in 662,078 is **Tens**
- b The number **501 000** comes just after 500 999
- c 25,012   25,022   25,032   **25 042**   **25 052**   **25 062**
- d The largest 5 same-digit number is **99,999**
- e 2,000 more than 21 900 is **23 900**

## Third: Answer the following.

- a Arrange the following numbers in an ascending order

45,603   45,036   45 306   45,630   45,063

- Ascending order **45 036 45 063 45 306 45 603 45 630**
- Descending order **45,630 45 603 45,306 45,063 45,036**

- b Complete using (<, = or >).

☒ 1,023 < 62,009   ☒ 78,569 < 79,003

☒ 100 thousands + 8 Hundreds < 100,000

☒ 60 + 600 < Sixty thousand and sixty

# 5 Arrays

10

1 Look at each array, then complete.

① The number of rows is **3**

The number of balls in each row is **5**

Total number of balls is

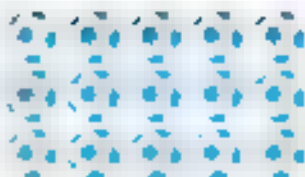
$$5 + 5 + 5 = 15 \text{ balls.}$$

The number of columns is **5**

The number of balls in each column is **3**

Total number of balls is  $3 + 3 + 3 + 3 + 3 = 15$  balls

**3** columns of **5** or **5** columns of **3**



② The number of rows is **2**

The number of dogs in each row is **5**

Total number of dogs is

$$5 + 5 = 10 \text{ dogs}$$

The number of columns is **5**

The number of dogs in each column is **2**

Total number of dogs is  $2 + 2 + 2 + 2 + 2 = 10$  dogs.

**2** columns of **5** or **5** columns of **2**



- ② The number of rows is **4**

The number of cars in each row is **2**

Total number of cars is  **$2 + 2 + 2 + 2 = 8$**  cars

- The number of columns is **2**

The number of cars in each column is **2**

Total number of cars is  **$4 + 4 = 8$**  cars

**4** columns of **2** or **2** columns of **4**



- ③ The number of rows is **4**

The number of apples in each row is **6**

- Total number of apples is

**$6 + 6 + 6 + 6 = 24$**  apples

The number of columns is **6**

The number of apples in each column is **4**

Total number of apples is  **$4 + 4 + 4 + 4 + 4 + 4 = 24$**  apples

**4** columns of **6** or **6** columns of **4**



- ④ The number of rows is **2**

The number of oranges in each row is **5**

Total number of oranges is

**$5 + 5 = 10$**  oranges

- The number of columns is **5**

The number of oranges in each column is **2**

Total number of oranges is  **$2 + 2 + 2 + 2 + 2 = 10$**  oranges

**2** columns of **5** or **5** columns of **2**



## 2 Create an array.

a



3 rows of 5

b



3 columns of 5

c



4 rows of 3

d



4 columns of 3

e



4 rows of 5

f



4 columns of 5

g



3 rows of 2

h



3 columns of 2



### 3 Find the total number of elements in each array



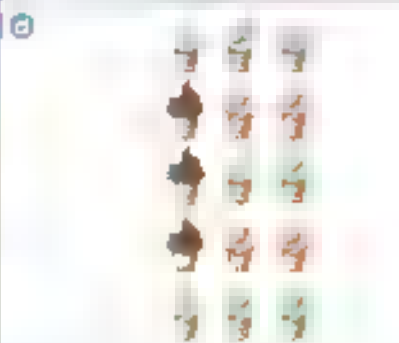
The total number is  $6 + 6 + 6$   
 $= 18$



The total number is  $7 + 7 + 7$   
 $= 21$



The total number is  $4 + 4 + 4 + 4 + 4$   
 $= 20$



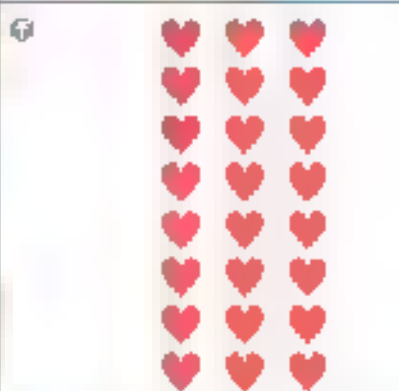
The total number is  $3 + 3 + 3 + 3 + 3$   
 $= 15$



The total number is  $9 + 9$   
 $= 18$



The total number is  $7 + 7$   
 $= 14$



The total number is  $3 + 3 + 3 + 3 + 3 + 3 + 3 + 3$   
 $= 24$

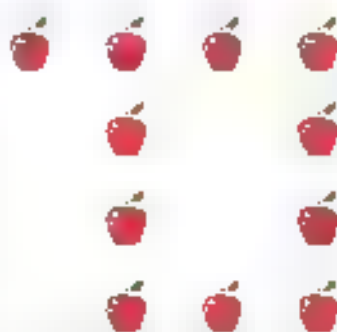
- 4 complete the missing array, then find the total number of elements in the array

①



The total number is  $5 + 3 + 3 + 3 + 3$   
 $= 15$

②



The total number is  $4 + 4 + 4 + 4$   
 $= 16$

③



The total number is  $4 + 4 + 4 + 4 + 4$   
 $= 20$

④



The total number is  $4 + 4 + 4 + 4$   
 $= 16$



## Exercise

Choose the correct answer

- Ninety thousand, ninety nine in standard form =  
 $900\ 990$  ☐  $90\ 990$  ☐  $90\ 099$  ☐
- The **greatest** 5 digit number is  
 $900\ 000$  ☐  $98\ 765$  ☐  $99\ 999$  ☐
- $700 + 0 + 0 + 7 =$   
 $700\ 007$  ☐  $70\ 007$  ☐  $707$  ☐
- 500 Hundreds =              Thousands  
 $150$  ☐  $500$  ☐  $5\ 000$  ☐
- $75\ 005 >$   
 $740\ 004$  ☐  $75\ 040$  ☐  $75\ 000$  ☐

## Exercise

Complete the following:

- The **place value** of b in 56 203 is **Thousands**
- 9 Ones + 6 Hundreds + 5 Tens + 23 Thousands = **23 659**
- 100 700 300 400 **500 600** (in the same pattern)
- The **greatest** number formed from the digits 5 7 0 2 and 8 is **87 520**  
 (Without repeating)
- The number that comes just after 25 999 is **26 000**

## Exercise

Answer the following.

- Look at the following array, then complete

- The number of rows is **4**
- The number of apples in each row is **3**
- Total number of apples =  
 $3 + 3 + 3 + 3 = 12$  apples
- 4** rows of **3** apples



- Arrange the following numbers in an ascending order


$75\ 020$   $75\ 202$   $74\ 002$   $75\ 220$   $75\ 200$

- 75 002** **75,020** **75,200** **75 202** **75 220**

# 6 Multiplication

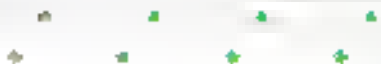
6


## 1 Complete:

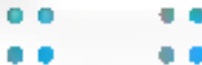

 Repeated addition:  $6 + 6 + 6 = 18$   
 Multiplication:  $3 \times 6 = 18$


 Repeated addition:  $5 + 5 + 5 + 5 = 20$   
 Multiplication:  $4 \times 5 = 20$


 Repeated addition:  $4 + 4 + 4 + 4 + 4 + 4 = 24$   
 Multiplication:  $6 \times 4 = 24$

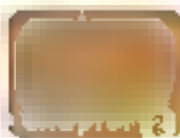

 Repeated addition:  $2 + 2 + 2 + 2 = 8$   
 Multiplication:  $4 \times 2 = 8$


 Repeated addition:  $7 + 7 + 7 = 21$   
 Multiplication:  $3 \times 7 = 21$


 Repeated addition:  $4 + 4 = 8$   
 Multiplication:  $2 \times 4 = 8$


 Repeated addition:  $3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 = 27$   
 Multiplication:  $9 \times 3 = 27$


 Repeated addition:  $9 + 9 + 9 + 9 + 9 + 9 + 9 = 63$   
 Multiplication:  $7 \times 9 = 63$



## 2 Complete:

Ⓐ  $5 + 5 + 5 + 5 = 20$  So,  $4 \times 5 = 20$  and  $5 \times 4 = 20$

Ⓑ  $4 + 4 + 4 + 4 + 4 = 20$  So,  $5 \times 4 = 20$  and  $4 \times 5 = 20$

Ⓒ  $6 + 6 = 12$  So,  $2 \times 6 = 12$  and  $6 \times 2 = 12$

Ⓓ  $2 + 2 + 2 + 2 + 2 + 2 = 12$   
So,  $6 \times 2 = 12$  and  $2 \times 6 = 12$

Ⓔ  $3 + 3 + 3 + 3 = 15$  So,  $5 \times 3 = 15$  and  $3 \times 5 = 15$

Ⓕ  $9 + 9 + 9 + 9 = 36$  So,  $4 \times 9 = 36$  and  $9 \times 4 = 36$

Ⓖ  $1 + 1 + 1 + 1 + 1 = 5$  So,  $5 \times 1 = 5$  and  $1 \times 5 = 5$

Ⓗ  $7 + 7 = 14$  So,  $2 \times 7 = 14$  and  $7 \times 2 = 14$

Ⓘ  $8 + 8 + 8 = 24$  So,  $3 \times 8 = 24$  and  $8 \times 3 = 24$

Ⓢ  $6 + 6 + 6 + 6 + 6 = 30$   
So,  $5 \times 6 = 30$  and  $6 \times 5 = 30$

Ⓛ  $5 \times 4 = 4 + 4 + 4 + 4 + 4$

Ⓜ  $6 \times 2 = 2 + 2 + 2 + 2 + 2 + 2$

Ⓝ  $8 \times 3 = 8 + 8 + 8$

Ⓟ  $6 \times 5 = 6 + 6 + 6 + 6 + 6$

Ⓡ  $6 \times 5 = 5 + 5 + 5 + 5 + 5 + 5$

Ⓓ  $4 \times 7 = 4 + 4 + 4 + 4 + 4 + 4 + 4$

Ⓕ  $4 \times 7 = 7 + 7 + 7 + 7$

Ⓖ  $5 \times 5 = 5 + 5 + 5 + 5 + 5$

3 Complete each of the following:

①



2 rows of 4

$$2 \times 4 = 8$$

①



4 rows of 2

$$4 \times 2 = 8$$

②



3 rows of 6

$$3 \times 6 = 18$$

②



3 rows of 4

$$3 \times 4 = 12$$

②



4 rows of 3

$$4 \times 3 = 12$$

③



4 rows of 6

$$4 \times 6 = 24$$

③



5 columns of 3

$$5 \times 3 = 15$$

③



5 columns of 4

$$5 \times 4 = 20$$

④



6 columns of 2

$$6 \times 2 = 12$$

④



6 columns of 4

$$6 \times 4 = 24$$

④



7 columns of 2

$$7 \times 2 = 14$$

⑤



8 columns of 1

$$8 \times 1 = 8$$

- 4 Draw an **array** that matches the multiplication, then use **repeated addition** to find the product of the multiplication.

8  $5 \times 3$



Add  $3 + 3 + 3 + 3 + 3$   
= 15

9  $3 \times 4$



Add  $4 + 4 + 4$   
= 12

10  $2 \times 3$



Add  $3 + 3$   
= 6

11  $4 \times 5$



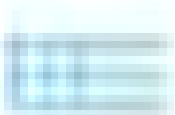
Add  $5 + 5 + 5 + 5$   
= 20

12  $3 \times 2$



Add  $2 + 2 + 2$   
= 6

13  $3 \times 5$



Add  $5 + 5 + 5$   
= 15

# Accumulative Assessment

7

up to Lesson 6



Choose the correct answer



- a The **value** of the digit 4 in 524,368 is  $4,000$  ☒  $40,000$  ☐  $400$
- b  $6 + 6 + 6 + 6 =$   $6 \times 6$  ☒  $6 \times 4$  ☐  $6 \div 4$
- c  $500 + 0 + 0 + 5 =$   $500,005$  ☒  $50,005$  ☐  $505$
- d  $3 \times 4 =$   $3 + 3 + 3$  ☒  $4 + 4 + 4$  ☐  $3 \div 4$
- e The number that comes just **before** 301,000 is  $300,000$  ☒  $301,001$  ☐  $300,999$



Complete the following:

- a 5 Tens + 120 Hundreds =  $150 + 12,000 = 12,150$
- b  $7 \times 3 = 7 + 7 + 7$
- c  $4 + 4 + 4 + 4 + 4 + 4 + 4 = 7 \times 4 = 28$
- d The **smallest** 5 different digit number is  $10,234$
- e 2, 4, 6, 8, 10,  $12$ ,  $14$ ,  $16$ ,  $18$



Answer the following

- a Arrange the following numbers in a descending order  
 $45,125$   $45,021$   $45,521$   $45,012$   $45,512$   
 $45,521$   $45,512$   $45,125$   $45,021$   $45,012$

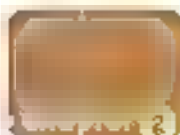
b Complete using (< = or >)

- Ⓐ  $45,015 < 45,104$  Ⓑ  $40,000 + 500 + 3 < 45,300$
- Ⓒ 700 Hundreds < 700,000 Ⓓ  $5 + 5 + 5 + 5 = 5 \times 4$

Complete using the following figure



- Repeated addition  $5 + 5 + 5 = 15$
- Multiplication  $3 \times 5 = 15$



## 7 Commutative Property in Multiplication

1 Complete using the Commutative Property of Multiplication.

(A)



3 rows of 4

$$3 \times 4 = 12$$



4 rows of 3

$$4 \times 3 = 12$$

So,  $3 \times 4 = 4 \times 3$

(B)



5 rows of 3

$$5 \times 3 = 15$$



3 rows of 5

$$3 \times 5 = 15$$

So,  $5 \times 3 = 3 \times 5$

(C)



3 rows of 2

$$3 \times 2 = 6$$



2 rows of 3

$$2 \times 3 = 6$$

So,  $3 \times 2 = 2 \times 3$

(D)



5 rows of 4

$$5 \times 4 = 20$$



4 rows of 5

$$4 \times 5 = 20$$

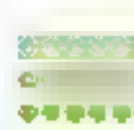
So,  $5 \times 4 = 4 \times 5$

(E)



6 rows of 3

$$6 \times 3 = 18$$

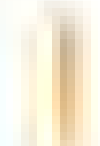


3 rows of 6

$$3 \times 6 = 18$$

So,  $6 \times 3 = 3 \times 6$

(F)



6 rows of 1

$$6 \times 1 = 6$$



1 row of 6

$$1 \times 6 = 6$$

So,  $6 \times 1 = 1 \times 6$

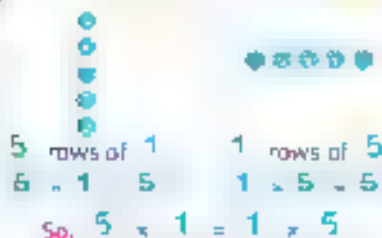


# Commutative Property in Multiplication

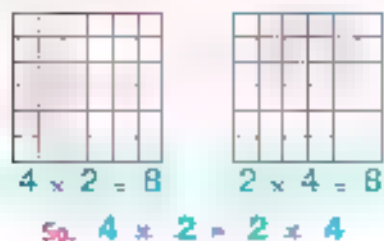
1



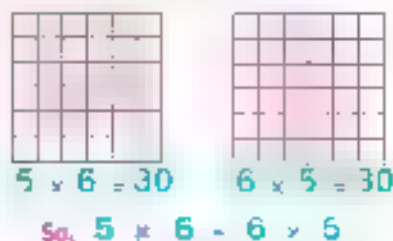
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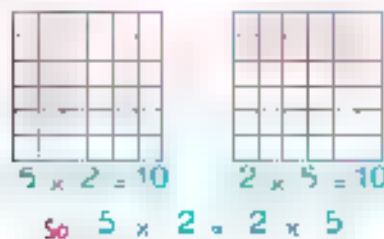
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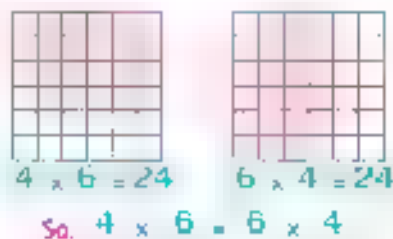
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5

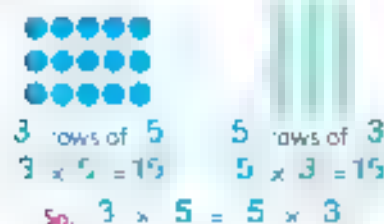


6

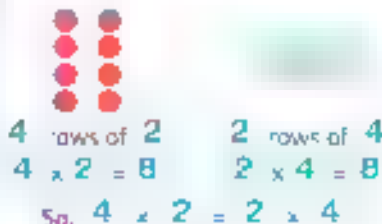


2 Write the multiplication sentence of each array then draw the array that shows the Commutative Property

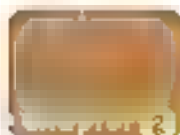
1



2







③



2 rows of 3

$$2 \times 3 = 6$$

$$\text{So, } 2 \times 3 = 3 \times 2$$



3 rows of 2

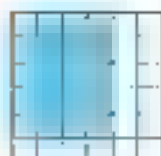
$$3 \times 2 = 6$$

④



$$4 \times 5 = 20$$

$$\text{So, } 4 \times 5 = 5 \times 4$$



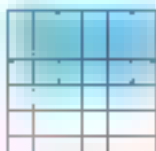
$$5 \times 4 = 20$$

⑤



$$6 \times 3 = 18$$

$$\text{So, } 6 \times 3 = 3 \times 6$$



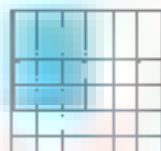
$$3 \times 6 = 18$$

⑥



$$3 \times 4 = 12$$

$$\text{So, } 3 \times 4 = 4 \times 3$$



$$4 \times 3 = 12$$

### 3 Complete the following:

①  $4 \times 8 = 8 \times 4$

②  $6 \times 3 = 3 \times 6$

③  $9 \times 6 = 6 \times 9$

④  $2 \times 7 = 7 \times 2$

⑤  $6 \times 5 = 5 \times 6$

⑥  $1 \times 5 = 5 \times 1$

⑦  $2 \times 8 = 8 \times 2$

⑧  $3 \times 4 = 4 \times 3$

⑨  $7 + 2 + 2 + 2 + 2 + 2 + 2 + 2 = 14$  then  $7 \times 2 = 14$

$$\text{And if } 7 + 7 = 14 \text{ then } 2 \times 7 = 14$$

$$\text{So, } 7 \times 2 = 2 \times 7$$

⑩  $6 + 4 + 4 + 4 + 4 + 4 + 4 = 24$  then  $6 \times 4 = 24$

$$\text{And if } 6 + 6 + 6 + 6 = 24 \text{ then } 4 \times 6 = 24$$

$$\text{So, } 6 \times 4 = 4 \times 6$$

⑪ If  $3 + 3 + 3 + 3 + 3 = 15$  then  $5 \times 3 = 15$

$$\text{And if } 5 + 5 + 5 = 15 \text{ then } 3 \times 5 = 15$$

$$\text{So, } 5 \times 3 = 3 \times 5$$

# Accumulative Assessment

## 8 up to Lesson 7



Choose the correct answer

100 Marks

- a Nineteen thousand nine hundred and nine =  
 $19\ 409$  ☐  $90\ 909$  ☒  $19\ 990$  ;
- c  $6000 + 60 =$   
 $6\ 060$  ☒  $6\ 006$  ☐  $600\ 060$
- c  $7 + 7 + 7 + 7 + 7 =$   
 $7 \times 7$  ☒  $7 \times 5$  ☐  $7 + 5$
- d  $8 \times 4 =$   
 $2 + 2$  ☒  $4 + 4 + 4 + 4$  ☐  $8 \times 8$
- e The value of 8 in 308,964 is  
 $800\ 000$  ☒  $80\ 000$  ☐  $8\ 000$

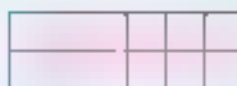
**Answer:** Complete the following:

- a
- b  $6 \times 5 = 5 + 5 + 5 + 5 + 5 + 5$
- c  $7 \times 6 = 6 \times 7$
- d The number 57 000 comes just after 56 999
- e 700 Thousands + 2 Hundreds + 108 Tens =  $700\ 000 + 200 + 1\ 080 = 701\ 280$



Answer the following

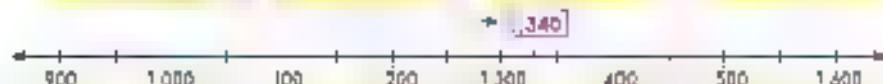
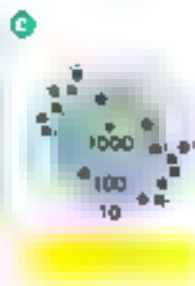
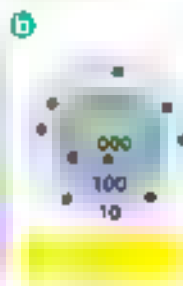
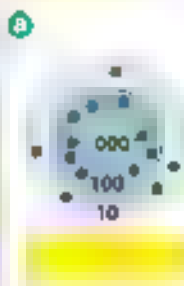
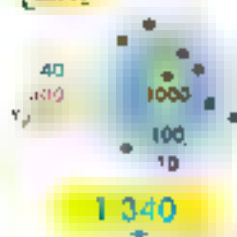
- a Arrange the following numbers in an ascending order  
 $70\ 050$   $75\ 005$   $75\ 500$   $75\ 505$   $75\ 055$   
**a. 70 050 75,005 75,055 75 500 75,505**
- b The number of columns is **6**  
 The number of squares in each column is **3**  
 Total number of squares is  $6 \times 3 = 18$
- c The number of rows is **2**  
 The number of squares in each row is **6**  
 Total number of squares is  $2 \times 6 = 12$



# PUZZLE

- 1 Write the number and match it to the suitable place on the number line as shown in the example

Ex.



A football weighs 3 kg



A cricket ball weighs 5 kg



- 2 Measure how heavy the balls are, then complete using ( $<$ ,  $>$ ,  $=$ )

a The mass of



The mass of



b The mass of



The mass of



c The mass of



The mass of



d The mass of



The mass of

Complete the drawing

Answers

3 kg > 5 kg  
520 g

<

20 g < 20 g

500 g < 500 g



## Lessons 1&2

1 Use the strategy you prefer to solve the following story problems.

- Ⓐ There are 9 apples in each basket.  
How many apples are there in 6 baskets?

Work Area



$$6 \times 9 = 54 \text{ apples}$$

- Ⓑ Eman has 2 boxes of oranges.  
Each box contains 5 oranges.  
How many oranges does Eman have?



$$2 \times 5 = 10 \text{ oranges}$$

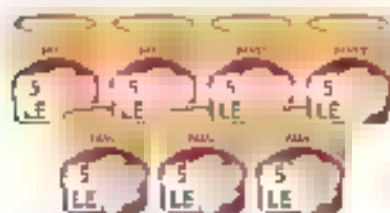
- Ⓒ There are 7 erasers in each box.  
How many erasers are there in 9 boxes?



$$9 \times 7 = 63 \text{ erasers}$$

- ② Each peanut container costs 5 LE  
How much do 7 peanut containers cost?

Work Area



$$7 \times 5 = 35 \text{ LE}$$

- ③ Ahmed went to the store 8 times last month. He buys 6 eggs each time he goes to the store.  
How many eggs did Ahmed buy last month?



$$8 \times 6 = 48 \text{ eggs}$$

- ④ Each child has 7 bananas.  
If there are 7 children,  
how many bananas are there in total?



$$7 \times 7 = 49 \text{ bananas}$$

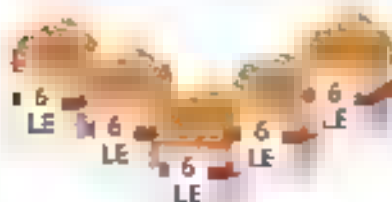
- ① Each child has 8 crayons.  
If there are 8 children,  
how many crayons are there in total?

Work Area



$$8 \times 8 = 64 \text{ crayons}$$

- ② Each box of cookies costs 6LE  
How much do 5 boxes cost?



$$5 \times 6 = 30$$

- ③ Each chair has 4 legs  
How many legs do 7 chairs have?



$$7 \times 4 = 28 \text{ legs}$$



- 1 Each book costs 9 LE.  
How much do 6 books cost?

Work Area



$$6 \times 9 = 54 \text{ LE}$$

- 2 Write a multiplication story for each multiplication sentence, then solve it.

Ⓐ  $5 \times 6$

Nada bought 5 books for LE 6 each.

What is the price of all books?

$$5 \times 6 = 30 \text{ LE}$$

Ⓑ  $4 \times 3$

Ali bought 4 pens for LE 3 each.

What is the price of all pens?

$$4 \times 3 = 12 \text{ LE}$$

Ⓒ  $5 \times 4$

Sara bought 5 bags for LE 4 each.

What is the price of all bags?

$$5 \times 4 = 20 \text{ LE}$$

Ⓓ  $3 \times 6$

Samir bought 3 balls for LE 6 each.

What is the price of all balls?

$$3 \times 6 = 18 \text{ LE}$$

# Accumulative Assessment

9

up to Lesson 2

**First:** Choose the correct answer

a  $8 + 8 + 8 + 8 + 8 + 8 + 8 =$

$7 \times 8$  ☐  $8 + 7$  ☐  $8 \times 8$

b  $6 + 6 + 6 + 6 + 6 = 10 + 10 + 10$

$< = >$

The **smallest** 5-digit number is

$0,000$  ☐  $2,345$  ☐  $10,234$

c  $10,000 + 55,000 + 1,000 =$

$65,100$  ☐  $55,100$  ☐  $65,000$

d The number 63,000 comes just after

$63,001$  ☐  $62,999$  ☐  $63,999$

**Second:** Complete the following

a  $9 + 9 + 9 + 9 = 4 \times 9$

b  $370,037 = 37 + 370,000$

The **place value** of 6 in 98.629 is **Hundreds**

d  $75 \text{ Thousands} + 50 \text{ Tens} + 12 \text{ Ones} = 75,512$

e  $60 \quad 54 \quad 48 \quad 42 \quad 36 \quad 30 \quad 24 \quad 18 \quad 12$

**Third:** Answer the following:

a Arrange the following numbers in an ascending order

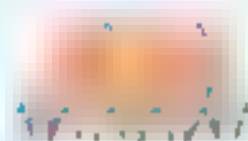
$45,450 \quad 45,045 \quad 45,504 \quad 45,405 \quad 45,465$

$45,045 \quad 45,054 \quad 45,405 \quad 45,450 \quad 45,504$

b How many eggs are there

in the opposite carton?

$6 \times 5 = 30 \text{ eggs}$







## Lessons 3&4

### Multiples of 2 and 3

#### 1 Complete

2 × 0 =	0
2 × 1 =	2
2 × 2 =	4
2 × 3 =	6
2 × 4 =	8
2 × 5 =	10
2 × 6 =	12
2 × 7 =	14
2 × 8 =	16
2 × 9 =	18
2 × 10 =	20

2 × 1 =	2
2 × 3 =	6
2 × 5 =	10
2 × 7 =	14
2 × 9 =	18
2 × 10 =	20
2 × 8 =	16
2 × 6 =	12
2 × 4 =	8
2 × 2 =	4
2 × 0 =	0

3 × 0 =	0
3 × 1 =	3
3 × 2 =	6
3 × 3 =	9
3 × 4 =	12
3 × 5 =	15
3 × 6 =	18
3 × 7 =	21
3 × 8 =	24
3 × 9 =	27
3 × 10 =	30

3 × 1 =	3
3 × 3 =	9
3 × 5 =	15
3 × 7 =	21
3 × 9 =	27
3 × 10 =	30
3 × 8 =	24
3 × 6 =	18
3 × 4 =	12
3 × 2 =	6
3 × 0 =	0

#### 2 Complete

2 × 1 =	2
2 × 10 =	20
2 × 2 =	4
2 × 9 =	18
2 × 3 =	6
2 × 8 =	16
2 × 4 =	8
2 × 7 =	14
2 × 5 =	10
2 × 0 =	0
2 × 6 =	12

2 × 0 =	0
2 × 4 =	8
2 × 8 =	16
2 × 1 =	2
2 × 5 =	10
2 × 9 =	18
2 × 2 =	4
2 × 6 =	12
2 × 10 =	20
2 × 3 =	6
2 × 7 =	14

3 × 1 =	3
3 × 7 =	21
3 × 2 =	6
3 × 10 =	30
3 × 3 =	9
3 × 9 =	27
3 × 4 =	12
3 × 8 =	24
3 × 5 =	15
3 × 0 =	0
3 × 6 =	18

3 × 0 =	0
3 × 3 =	9
3 × 6 =	18
3 × 9 =	27
3 × 1 =	3
3 × 4 =	12
3 × 7 =	21
3 × 10 =	30
3 × 2 =	6
3 × 5 =	15
3 × 8 =	24

### 3 Complete:

$\div 2$	1	$\div 2$	$\div 2$	$\div 2$	$\div 2$
$\times 5$		$\times 4$	$\times 5$	$\times 2$	$\times 1$
10		8	6	4	2
3		3	3	3	3
$\div 10$		9	$\div 8$	$\div 7$	6
30		27	24	21	18
$\div 2$	$\div 2$	$\div 2$	$\div 2$	$\div 2$	
$\times 0$	$\times 6$	$\times 7$	$\times 8$	$\times 9$	
0	12	14	16	18	
$\div 3$	$\div 3$	$\div 3$	$\div 3$	$\div 3$	
5	$\times 4$	$\div 3$	2	1	
15	12	9	6	3	

### 4 Match:

$$2 \times 0$$

$$2 \times 3$$

$$2 \times 6$$

$$2 \times 9$$

$$3 \times 2$$

$$3 \times 6$$

$$3 \times 0$$

$$3 \times 4$$

### 5 Complete:

$$\textcircled{A} 5 + 5 = 2 \times 5 = 10$$

$$\textcircled{C} 4 + 4 + 4 = 3 \times 4 = 12$$

$$\textcircled{B} 6 + 6 = 2 \times 6 = 12$$

$$\textcircled{D} 7 + 7 + 7 = 3 \times 7 = 21$$

$$\textcircled{E} 8 + 8 = 2 \times 8 = 16$$

$$\textcircled{F} 9 + 9 + 9 = 3 \times 9 = 27$$

$$\textcircled{G} 3 + 3 = 2 \times 3 = 6$$

$$\textcircled{H} 2 + 2 + 2 = 3 \times 2 = 6$$



**6 Use the 120 Chart to find:**

- Ⓐ List the first 20 multiples of 2.

2 , 4 , 6 , 8 , 10 , 12 , 14 , 16 , 18 , 20  
22 , 24 , 26 , 28 , 30 , 32 , 34 , 36 , 38 , 40

- Ⓑ List the first 20 multiples of 3.

3 , 6 , 9 , 12 , 15 , 18 , 21 , 24 , 27 , 30  
33 , 36 , 39 , 42 , 45 , 48 , 51 , 54 , 57 , 60

- Ⓒ List the common multiples of 2 and 3 up to 50.

6, 12, 18, 24, 30, 36, 42, 48

**7 Choose the correct answer.**

Ⓐ  $3 + 3 + 3 + 3 =$

(  $4 \times 3$  ☒  $4 \times 4$  ☐  $2 \times 6$  )

Ⓑ  $6 + 6 =$

(  $6 \times 6$  ☐  $3 \times 4$  ☐  $2 \times 2$  )

Ⓒ  $5 + 5 + 5 + 5 =$

(  $5 \times 4$  ☐  $5 \times 4$  ☒  $5 \times 5$  )

Ⓓ  $8 + 8 + 8 =$

(  $3 + 8$  ☐  $12 + 12$  ☒  $8 \times 8$  )

Ⓔ  $4 \times 4 =$

(  $8 + 8$  ☒  $4 \times 6$  ☐  $6 \times 6$  )

Ⓘ  $4 + 6 =$

(  $7 + 5$  ☐  $10 \times 2$  ☐  $2 \times 5$  )

Ⓚ  $4 \times 2 =$

(  $4 \times 4$  ☐  $4 + 4$  ☒  $2 + 2$  )

Ⓛ  $9 + 9 =$

(  $3 \times 3 \times 3$  ☐  $6 + 6$  ☒  $(6 \times 3)$  )

# Multiples of 4 and 5

## 1 Complete

4	0	0
4 × 1 =	4	
4 × 2 =	8	
4 × 3 =	12	
4 × 4 =	16	
4 × 5 =	20	
4 × 6 =	24	
4 × 7 =	28	
4 × 8 =	32	
4 × 9 =	36	
4 × 10 =	40	

4	1	4
4 × 3 =	12	
4 × 5 =	20	
4 × 7 =	28	
4 × 9 =	36	
4 × 10 =	40	
4 × 8 =	32	
4 × 6 =	24	
4 × 4 =	16	
4 × 2 =	8	
4 × 0 =	0	

5	0	0
5 × 1 =	5	
5 × 2 =	10	
5 × 3 =	15	
5 × 4 =	20	
5 × 5 =	25	
5 × 6 =	30	
5 × 7 =	35	
5 × 8 =	40	
5 × 9 =	45	
5 × 10 =	50	

5	1	6
5 × 3 =	15	
5 × 5 =	25	
5 × 7 =	35	
5 × 9 =	45	
5 × 10 =	50	
5 × 8 =	40	
5 × 6 =	30	
5 × 4 =	20	
5 × 2 =	10	
5 × 0 =	0	

## 2 Complete

4	1	4
4 × 5 =	20	
4 × 0 =	0	
4 × 7 =	28	
4 × 9 =	36	
4 × 4 =	16	
4 × 2 =	8	
4 × 6 =	24	
4 × 10 =	40	
4 × 8 =	32	
4 × 3 =	12	

4	0	0
4 × 2 =	8	
4 × 4 =	16	
4 × 6 =	24	
4 × 8 =	32	
4 × 10 =	40	
4 × 1 =	4	
4 × 3 =	12	
4 × 5 =	20	
4 × 7 =	28	
4 × 9 =	36	

5	1	5
5 × 3 =	15	
5 × 5 =	25	
5 × 7 =	35	
5 × 9 =	45	
5 × 0 =	0	
5 × 2 =	10	
5 × 4 =	20	
5 × 6 =	30	
5 × 8 =	40	
5 × 10 =	50	

5	0	0
5 × 1 =	5	
5 × 2 =	10	
5 × 3 =	15	
5 × 4 =	20	
5 × 5 =	25	
5 × 6 =	30	
5 × 7 =	35	
5 × 8 =	40	
5 × 9 =	45	
5 × 10 =	50	



### 3 Complete

• 5	• 5	• 5	• 5	• 5
• 5	• 4	• 3	• 2	• 1
25	20	15	10	5
• 4	• 4	• 4	• 4	• 4
• 10	9	• 8	• 7	6
40	36	32	28	24
• 5	• 5	• 5	• 5	• 5
• 0	• 6	• 7	• 8	9
0	30	35	40	45
• 4	4	4	• 4	• 4
• 5	• 4	• 3	• 2	• 1
20	16	12	8	4
• 30	• 4	• 4	• 4	• 5
1	• 9	• 5	• 5	• 7
30	36	20	20	35
• 5	• 10	• 5	• 7	• 0
3	• 4	• 9	• 4	• 5
15	40	45	48	0

### 4 Match.

$$4 + 4 + 4 + 4$$

$$8 + 8 + 8$$

$$6 + 6 + 6$$

$$10 + 10 + 10$$

$$9 + 9$$

$$2 \times 8$$

$$5 \times 6$$

$$4 \times 6$$

## 5 Complete

$$\textcircled{a} 4 + 4 + 4 + 4 + 4 = 5 \times 4 = 20$$

$$\textcircled{b} 5 + 5 + 5 + 5 + 5 + 5 + 5 + 5 = 8 \times 5 = 40$$

$$\textcircled{c} 5 \times 6 = 10 + 10 + 10 = 30$$

$$\textcircled{d} 3 \times 4 = 6 + 6 = 12$$

$$\textcircled{e} 8 + 8 + 8 + 8 + 8 = 4 \times 10 = 40$$

$$\textcircled{f} 4 + 4 + 4 + 4 = 2 \times 8 = 16$$

$$\textcircled{g} 5 \times 4 = 2 \times 10 = 20 \qquad \textcircled{h} 4 \times 6 = 3 \times 8 = 24$$

## 6 Use the 120 Chart to find:

- $\textcircled{a}$  List the first 20 multiples of 4:

4	8	12	16	20	24	28	32	36	40
44	48	52	56	60	64	68	72	76	80

- $\textcircled{b}$  List the first 20 multiples of 5:

5	10	15	20	25	30	35	40	45	50
55	60	65	70	75	80	85	90	95	100

- $\textcircled{c}$  List the common multiples of 4 and 5 up to 50

20, 40

- $\textcircled{d}$  List the common multiples of 2, 3 and 4, up to 40

12, 24, 36



## 7 Choose the correct answer

☐  $5 + 5 + 5 + 5 =$

(  $5 \times 5$  ☒  $4 \times 4$  ☐  $5 \times 4$  )

☐  $8 + 8 + 8 =$

(  $8 \times 3$  ☒  $8 + 3$  ☐  $8 \times 8$  )

☐  $6 + 6 + 6 + 6 =$

(  $6 \times 4$  ☒  $6 \times 6$  ☐  $6 + 4$  )

☐  $8 \times 2 =$

(  $8 + 2$  ☐  $8 + 4$  ☒  $8 \times 8$  )

☐  $9 \times 9 =$

(  $9 \times 9$  ☒  $9 \times 2$  ☐  $6 \times 3$  )

☐  $6 + 6 =$

(  $6 \times 2$  ☒  $6 \times 6$  ☐  $6 + 6$  )

☐  $4 \times 4 =$

(  $6 \times 2$  ☐  $1 \times 6$  ☒  $3 \times 5$  )

☐  $2 \times 5$        $3 \times 3$

( ☐ ☒ ☐ ☐ )

☐  $5 + 5 + 5$        $4 \times 4$

( ☐ ☒ ☐ ☐ )

☐  $8 + 8 + 8$        $6 \times 4$

( ☐ ☒ ☐ ☐ )

☐  $9 + 9 + 9$        $7 \times 4$

( ☐ ☒ ☐ ☐ )

☐  $5 \times 6 = 3 \times$

$5$  ☒  $10$  ☐  $6$  )

☐  $8 + 8 + 8 + 8 + 8 = 4 \times$

$8$  ☒  $5$  ☐  $10$  )

☐  $6 + 6 + 6 + 6 = 3 \times$

(  $8$  ☐  $6$  ☒  $4$  )

# Multiples of 6 and 7

384

## 1 Complete

6	0	0
6 × 1 =	6	
6 × 2 =	12	
6 × 3 =	18	
6 × 4 =	24	
6 × 5 =	30	
6 × 6 =	36	
6 × 7 =	42	
6 × 8 =	48	
6 × 9 =	54	
6 × 10 =	60	

6	1	6
6 × 3 =	18	
6 × 5 =	30	
6 × 7 =	42	
6 × 9 =	54	
6 × 10 =	60	
6 × 8 =	48	
6 × 6 =	36	
6 × 4 =	24	
6 × 2 =	12	
6 × 0 =	0	

7	0	0
7 × 1 =	7	
7 × 2 =	14	
7 × 3 =	21	
7 × 4 =	28	
7 × 5 =	35	
7 × 6 =	42	
7 × 7 =	49	
7 × 8 =	56	
7 × 9 =	63	
7 × 10 =	70	

7	1	7
7 × 3 =	21	
7 × 5 =	35	
7 × 7 =	49	
7 × 9 =	63	
7 × 10 =	70	
7 × 8 =	56	
7 × 6 =	42	
7 × 4 =	28	
7 × 2 =	14	
7 × 0 =	0	

## 2 Complete

6	1	6
6 × 3 =	18	
6 × 5 =	30	
6 × 7 =	42	
6 × 9 =	54	
6 × 10 =	60	
6 × 0 =	0	
6 × 2 =	12	
6 × 4 =	24	
6 × 6 =	36	
6 × 8 =	48	

7	2	14
7 × 4 =	28	
7 × 6 =	42	
7 × 8 =	56	
7 × 10 =	70	
7 × 1 =	7	
7 × 3 =	21	
7 × 5 =	35	
7 × 7 =	49	
7 × 9 =	63	
7 × 0 =	0	

1	6	6
3 × 6 =	18	
5 × 6 =	30	
7 × 6 =	42	
9 × 6 =	54	
10 × 7 =	70	
8 × 7 =	56	
6 × 7 =	42	
4 × 7 =	28	
2 × 7 =	14	
0 × 1 =	0	

0	1	0
1 × 7 =	7	
2 × 6 =	12	
3 × 7 =	21	
4 × 6 =	24	
5 × 7 =	35	
6 × 6 =	36	
7 × 7 =	49	
8 × 6 =	48	
9 × 7 =	63	
10 × 6 =	60	



## 3 Complete

• 6	• 6	• 6	• 6	• 6
7	• 9	• 5	• 4	• 8
42	54	30	24	48
• 7	• 7	• 7	• 7	• 7
• 4	• 3	• 6	• 5	• 2
28	21	42	35	14
• 7	• 6	• 7	• 6	• 7
• 1	• 0	• 8	• 6	• 7
7	0	56	36	49
• 10	• 6	• 7	• 8	• 7
• 8	• 8	• 4	• 3	• 9
56	48	48	44	63
• 7	• 8	• 10	• 6	• 5
• 10	• 7	• 6	• 6	• 8
70	56	60	36	40
• 5	• 4	• 2	• 2	• 3
• 6	• 6	• 7	• 8	• 9
30	24	14	16	27

## 4 Match:

$3 \times 4$

$3 \times 6$

$3 \times 8$

$4 \times 9$

$4 \times 4$

$2 \times 9$

$2 \times 6$

$2 \times 8$

$4 \times 6$

$6 \times 6$

## 5 Complete:

$$\textcircled{1} 4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 = 8 \times 4 = 32$$

$$\textcircled{2} 5 + 5 + 5 + 5 + 5 + 5 + 5 = 7 \times 5 = 35$$

$$\textcircled{3} 5 \times 8 = 8 + 8 + 8 + 8 + 8 = 40$$

$$\textcircled{4} 4 \times 4 = 8 + 8 = 16$$

$$\textcircled{5} 7 + 7 + 7 + 7 + 7 = 5 \times 7 = 35$$

$$\textcircled{6} 4 + 4 + 4 + 4 = 2 \times 8 = 16$$

$$\textcircled{7} 5 \times 8 = 4 \times 10 = 40 \qquad \textcircled{8} 6 \times 6 = 4 \times 9 = 36$$

## 6 Use the 100 Chart to find:

- $\textcircled{1}$  List the first 20 multiples of 6.

6    12    18    24    30    36    42    48    54    60  
66    72    78    84    90    96    102    108    114    120

- $\textcircled{2}$  List the first 20 multiples of 7.

7    14    21    28    35    42    49    56    63    70  
77    84    91    98    105    112    119    126    133    140

- $\textcircled{3}$  List the common multiples of 6 and 7 up to 100.

42, 84

- $\textcircled{4}$  List the common multiples of 3, 4 and 6, up to 60.

12, 24, 36, 48, 60



## 7 Choose the correct answer.

Ⓐ  $5 + 5 + 5 + 5 + 5 + 5 =$

(  $5 \times 6$  Ⓐ  $6 \times 6$  Ⓑ  $5 \times 5$  )

Ⓑ  $8 + 8 =$

(  $8 \times 8$  Ⓑ  $8 + 2$  Ⓐ  $4 \times 4$  )

Ⓒ  $6 + 6 + 6 + 6 =$

(  $4 \times 6$  Ⓐ  $5 \times 8$  Ⓑ  $6 + 4$  )

Ⓓ  $8 \times 2 =$

(  $8 + 2$  Ⓐ  $8 + 3$  Ⓑ  $8 \times 8$  )

Ⓔ  $9 + 9 + 9 + 9 + 9 + 9 =$

(  $9 \times 9$  Ⓐ  $9 + 6$  Ⓑ  $6 \times 9$  )

Ⓕ  $6 + 6 + 6 =$

(  $7 \times 6$  Ⓐ  $6 \times 6$  Ⓑ  $6 + 5$  )

Ⓖ  $4 \times 5 =$

(  $10 \times 2$  Ⓐ  $1 \times 6$  Ⓑ  $3 \times 5$  )

Ⓗ  $3 \times 5$        $3 \times 8$

(  $< \text{Ⓗ} = \text{Ⓙ} >$  )

Ⓙ  $5 + 5 + 5 + 5$        $3 \times 7$

(  $< \text{Ⓙ} = \text{Ⓙ} >$  ,

Ⓙ  $8 + 8 + 8 + 8$        $9 \times 4$

(  $< \text{Ⓙ} = \text{Ⓙ} >$  )

Ⓙ  $9 + 9 + 9 + 9$        $9 \times 4$

(  $< \text{Ⓙ} = \text{Ⓙ} >$  )

Ⓙ  $4 \times 6 = 3 \times$

(  $5$  Ⓙ  $8$  Ⓙ  $6$  )

Ⓙ  $8 + 8 + 8 + 4 \times$

(  $8$  Ⓙ  $6$  Ⓙ  $10$  )

Ⓙ  $6 + 6 + 6 = 2 \times$

(  $9$  Ⓙ  $6$  Ⓙ  $4$  )

## 8 Complete in the same pattern.

Ⓐ 0 2 4 6 8 10 12 14 16 18 20

Ⓑ 0 3 6 9 12 15 18 21 24 27 30

Ⓒ 0 4 8 12 16 20 24 28 32 36 40

Ⓓ 0 5 10 15 20 25 30 35 40 45 50

Ⓐ 0 6 12 18 24 **30** **36** 42 48 54 60

Ⓑ 0 7 14 21 28 **35** **42** 49 56 63 70

## 9 Answer the following:

- Ⓐ On Saturday's walk home, she saw 6 cars.

Each car has 4 wheels.

How many wheels did she see in all?

$$6 \times 4 = 24 \text{ wheels}$$



- Ⓑ Mana brought 6 bags of cookies to school.

Each bag had 3 cookies.

How many cookies were there altogether?

$$6 \times 3 = 18 \text{ cookies}$$



- Ⓒ Malek runs 3 miles each day.

How many miles does he run in 7 days?

$$7 \times 3 = 21 \text{ miles}$$



- Ⓓ A bag of oranges contains 4 oranges.

How many oranges are there in

8 bags?

$$8 \times 4 = 32 \text{ oranges}$$





## Multiples of 8, 9 and 10

### 1 Complete

8

$$8 \times 1 = 8$$

$$8 \times 3 = 24$$

$$8 \times 5 = 40$$

$$8 \times 7 = 56$$

$$8 \times 9 = 72$$

$$8 \times 10 = 80$$

$$8 \times 8 = 64$$

$$8 \times 6 = 48$$

$$8 \times 4 = 32$$

$$8 \times 2 = 16$$

$$8 \times 0 = 0$$

9

$$9 \times 1 = 9$$

$$9 \times 3 = 27$$

$$9 \times 5 = 45$$

$$9 \times 7 = 63$$

$$9 \times 9 = 81$$

$$9 \times 10 = 90$$

$$9 \times 8 = 72$$

$$9 \times 6 = 54$$

$$9 \times 4 = 36$$

$$9 \times 2 = 18$$

$$9 \times 0 = 0$$

10

$$10 \times 10 = 100$$

$$1 \times 10 = 10$$

$$2 \times 10 = 20$$

$$3 \times 10 = 30$$

$$4 \times 10 = 40$$

$$5 \times 10 = 50$$

$$6 \times 10 = 60$$

$$7 \times 10 = 70$$

$$8 \times 10 = 80$$

$$9 \times 10 = 90$$

$$10 \times 10 = 100$$

### 2 Complete

8

$$1 \times 8 = 8$$

$$3 \times 8 = 24$$

$$5 \times 8 = 40$$

$$7 \times 8 = 56$$

$$9 \times 8 = 72$$

$$10 \times 8 = 80$$

$$8 \times 8 = 64$$

$$6 \times 8 = 48$$

$$4 \times 8 = 32$$

$$2 \times 8 = 16$$

$$0 \times 8 = 0$$

9

$$0 \times 9 = 0$$

$$1 \times 9 = 9$$

$$2 \times 9 = 18$$

$$3 \times 9 = 27$$

$$4 \times 9 = 36$$

$$5 \times 9 = 45$$

$$6 \times 9 = 54$$

$$7 \times 9 = 63$$

$$8 \times 9 = 72$$

$$9 \times 9 = 81$$

$$10 \times 9 = 90$$

10

$$5 \times 10 = 50$$

$$3 \times 10 = 30$$

$$7 \times 10 = 70$$

$$2 \times 10 = 20$$

$$9 \times 10 = 90$$

$$1 \times 10 = 10$$

$$6 \times 10 = 60$$

$$4 \times 10 = 40$$

$$8 \times 10 = 80$$

$$0 \times 10 = 0$$

$$10 \times 10 = 100$$

### 3 Complete

$\div$	2	7	$\div$	3	4	$\div$	6
	2	7		7	8		8
	4	14		21	32		48
$\div$	2	$\div$	3	$\div$	5	$\div$	7
$\times$	3	$\times$	5		8	$\times$	7
	6		15		24		35
$\div$	2	$\div$	4	$\div$	4	$\div$	6
	4	$\times$	4	$\times$	6	$\times$	6
	8		16		24		36
$\div$	3	$\div$	2	$\div$	5	$\div$	4
$\times$	3	$\times$	8	$\times$	5	$\times$	9
	9		16		25		63
	2		3	$\div$	3		5
$\times$	5	$\times$	6	$\times$	9	$\times$	8
	10		18		27		40
	2		2	$\div$	4		6
	6	$\times$	9	$\times$	7	$\times$	7
	12		18		28		42
$\div$	3	$\div$	4	$\div$	5	$\div$	8
	4	$\times$	5	$\times$	6	$\times$	9
	12		20		30		72
	6	$\div$	3	$\div$	4		10
$\times$	10	$\times$	10	$\times$	10	$\times$	10
	60		30		40		100
							81



#### 4 Match.

$9 \times 4$



$9 \times 2$



$6 \times 4$



$6 \times 2$



$4 \times 4$



$5 \times 8$



$3 \times 8$



$6 \times 6$



$3 \times 6$



$4 \times 10$



$3 \times 4$



$2 \times 8$



#### 5 Use the 120 Chart to find:

- Ⓐ List the common multiples of 2 and 3, up to 30

**6, 12, 18, 24, 30**

- Ⓑ List the common multiples of 5 and 4, up to 40

**20, 40**

- Ⓒ List the common multiples of 4 and 6, up to 60

**12, 24, 36, 48, 60**

- Ⓓ List the common multiples of 6 and 9, up to 60

**18, 36, 54**

- Ⓔ List the common multiples of 6 and 8, up to 80

**24, 48, 72**

- Ⓕ List all multiples of 10, up to 120

**10 20 30 40 50 60 70 80, 90, 100 110 120**

- Ⓖ List the common multiples of 5 and 10, up to 100

**10 20 30, 40 50 60 70 80, 90, 100**

#### 6 Complete in the same pattern

- Ⓐ 0 2 4 6 8 10 12 14 16 18 20

- Ⓑ 30 27 24 21 18 15 12 9 6 3 0

Ⓐ	0	4	8	12	16	20	24	28	32	36	40
Ⓑ	50	45	40	35	30	25	20	15	10	5	0
Ⓒ	0	6	12	18	24	30	36	42	48	54	60
Ⓓ	70	63	56	49	42	35	28	21	14	7	0
Ⓔ	0	8	16	24	32	40	48	56	64	72	80
⓫	90	81	72	63	54	45	36	27	18	9	0

## 7 Answer the following.

- Ⓐ There are 7 apples in each basket.

How many apples are there in 6 baskets?

$$6 \times 7 = 42 \text{ apples}$$



- Ⓑ Eman has 2 boxes of oranges.

Each box contains 5 oranges.

How many oranges does Eman have?

$$2 \times 5 = 10 \text{ oranges}$$



- Ⓒ There are 9 erasers in each box.

How many erasers are there in

8 boxes?

$$9 \times 8 = 72 \text{ erasers}$$





# Accumulative Assessment

## 10 up to Lesson 4

**First:** Choose the correct answer:

- a  $6 \times 9 = 4 \times 9$  (6) ~~7~~ ~~8~~ ~~9~~  
 b  $8 + 8 + 8 + 8 + 8 =$   $8 \times 8$  ~~8 + 5~~ ~~4 \times 10~~  
 c  $450 + 45 =$   $45\ 045$  ~~495~~ ~~4\ 545~~  
 d  $750\ 000 + 15\ 000 + 40 =$   $751\ 540$  ~~765\ 040~~ ~~750\ 190~~  
 e 200 Thousands = Tens  $200\ 000$  ~~20\ 000~~ ~~2\ 000~~

**Second:** Complete the following

- a The number that comes just before 20,000 is **19 999**  
 b The value of the digit 0 in 23,074 is **0**  
 c  $10 \times 3 =$  **6**  $\times 5$   
 d  $8 + 8 + 8 + 8 + 8 + 8 =$  **6**  $\times$  **6**  
 e Nine hundred thousand and nine in standard form = **900 009**

**Third:** Answer the following

- a Find the result of the following

①	$\begin{array}{r} 9 \\ \times 5 \\ \hline 45 \end{array}$	②	$\begin{array}{r} 8 \\ \times 8 \\ \hline 64 \end{array}$	③	$\begin{array}{r} 3 \\ \times 4 \\ \hline 12 \end{array}$
---	---	---	---	---	---

b Complete using (<, = or >)

① $5 + 5 + 5 + 5$	$<$	$5 \times 5$	② $4 + 4 + 4$	$=$	$2 \times 6$
③ $8 \times 5$	$>$	$8 + 5$	④ $9 \times 3$	$=$	$3 \times 9$

- c If each pen costs 6LE  
 how much do 8 pens cost?

**$6 \times 8 = 48$  LE**





# Lesson 5

1 Write the factor pairs and factors of each number.

Ⓐ                      3

$$1 \times 3 \qquad 3 \times 1$$

Factors are 1, 3

Ⓑ                      2

$$1 \times 2 \qquad 2 \times 1$$

Factors are 1, 2

Ⓒ                      11

$$1 \times 11 \qquad 11 \times 1$$

Factors are 1, 11

Ⓓ                      13

$$1 \times 13 \qquad 13 \times 1$$

Factors are 1, 13

Ⓔ                      4

$$1 \times 4 \qquad 4 \times 1$$

$$2 \times 2$$

Factors are 1, 2, 4

Ⓛ                      9

$$1 \times 9 \qquad 9 \times 1$$

$$3 \times 3$$

Factors are 1, 3, 9

Ⓜ                      25

$$1 \times 25 \qquad 25 \times 1$$

$$5 \times 5$$

Factors are 1, 5, 25

Ⓨ                      49

$$1 \times 49 \qquad 49 \times 1$$

$$7 \times 7$$

Factors are 1, 7, 49

Ⓟ                      6

$$1 \times 6 \qquad 6 \times 1$$

$$2 \times 3 \qquad 3 \times 2$$

Factors are 1, 2, 3, 6

Ⓡ                      10

$$1 \times 10 \qquad 10 \times 1$$

$$2 \times 5 \qquad 5 \times 2$$

Factors are 1, 2, 5, 10



12

$$\begin{array}{rcl} ① & 1 \times 12 & 12 \times 1 \\ & 2 \times 6 & 6 \times 2 \\ & 3 \times 4 & 4 \times 3 \end{array}$$

Factors are 1, 2, 3, 4, 6, 12

18

$$\begin{array}{rcl} ① & 1 \times 18 & 18 \times 1 \\ & 2 \times 9 & 9 \times 2 \\ & 3 \times 6 & 6 \times 3 \end{array}$$

Factors are 1, 2, 3, 6, 9, 18

16

$$\begin{array}{rcl} ① & 1 \times 16 & 16 \times 1 \\ & 2 \times 8 & 8 \times 2 \\ & 4 \times 4 & \end{array}$$

Factors are 1, 2, 4, 8, 16

20

$$\begin{array}{rcl} ① & 1 \times 20 & 20 \times 1 \\ & 2 \times 10 & 10 \times 2 \\ & 4 \times 5 & 5 \times 4 \end{array}$$

Factors are 1, 2, 4, 5, 10, 20

## 2 Complete the following:

① The number 1 has 1 factor(s)

② The number 3 has 2 factor(s)

③ The number 2 has 2 factor(s)

④ The number 17 has 2 factor(s)

⑤ The number 24 has 8 factors

⑥ The number 30 has 8 factor(s).

⑦ 1, 2, 3, 4, 6 and 12 are the factors of 12

⑧ 1, 3, 5 and 15 are the factors of 15

# Accumulative Assessment

11

up to Lesson 5

## First: Choose the correct answer

- a Eight hundred thousand, eight hundred in standard form, is

800,800 ☒ 808,000 ☐ 800,008

- b The **smallest** 5 different digit number is

10,000 ☒ 11111 ☐ 0.234

$$500,000 + 2 + 40,000 + 60 + 9,000 + 700 =$$

524,697 ☒ 549,762 ☐ 267,945

$$5 + 5 \div 5 + 5 =$$

4 + 5 ☒ 4  $\times$  5 ☐ 5  $\times$  5

$$9 + 9 + 9 + 9 = 6 \times$$

(9 ☒ 4 ☐ 6)

## Second: Complete the following

- a The **place value** of 0 in 208 123 is **Ten Thousands**

$$95 \text{ Thousands} + 4 \text{ Ones} + 6 \text{ Hundreds} = \mathbf{95\,604}$$

X, XX, XXX, XXXX, XXXXX, in the same pattern

$$6 \times 3 = \mathbf{6} + \mathbf{6} + \mathbf{6}$$

$$6 \times 0 = \mathbf{0}$$

## Third: Answer the following:

- a Write the factor pairs and factors of each number

$$\begin{array}{cc} & \mathbf{8} \\ \mathbf{1} & \times \\ \mathbf{2} & \times \end{array} \quad \begin{array}{cc} & \mathbf{8} \\ \mathbf{8} & \times \\ \mathbf{4} & \times \end{array} \quad \begin{array}{cc} & \mathbf{1} \\ \mathbf{8} & \times \\ \mathbf{4} & \times \end{array}$$

Factors are **1, 2, 4, 8**

$$\begin{array}{cc} & \mathbf{15} \\ \mathbf{1} & \times \\ \mathbf{3} & \times \end{array} \quad \begin{array}{cc} & \mathbf{15} \\ \mathbf{15} & \times \\ \mathbf{5} & \times \end{array} \quad \begin{array}{cc} & \mathbf{1} \\ \mathbf{15} & \times \\ \mathbf{5} & \times \end{array}$$

Factors are **1, 3, 5, 15**

- b Marwa has 4 bags of apples, each bag contains 6 apples

How many apples are there in all bags?

$$\mathbf{4 \times 6 = 24 \text{ apples}}$$

# Lessons 6&7

1 Write the time shown on the digital clock and in words.



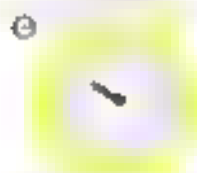
8 : 00

8 o'clock



7 : 35

25 to 8



10 : 10

10 past 10



9 : 45

Quarter to 10



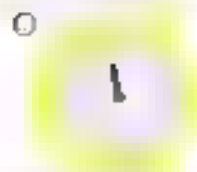
9 : 20

20 past 9



9 : 55

5 to 10



11 : 30

Half past 11



12 : 05

5 past 12



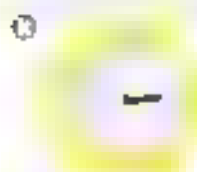
5 : 40

20 to 6



4 : 15

Quarter past 4



2 : 50

10 to 3



1 : 25

25 past 1

## 2 Draw the analog clock hands and write the time in words.



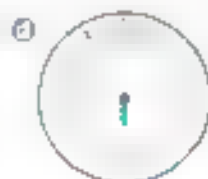
9 00  
9 o'clock



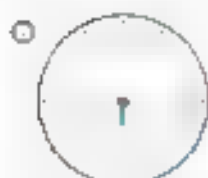
12 55  
5 to 1



2 10  
10 past 2



6 05  
5 past 6



6 20  
20 past 6



4 15  
Quarter past 4



7 30  
Half past 7



8 25  
25 past 8



5 40  
20 to 6



3 35  
25 to 4



10 50  
10 to 12



10 45  
Quarter to 11

## 3 Draw the hands of the analog clock and write the time on the digital clock.



5 . 10

It's 10 past 5



11 . 15

It's quarter past 11



9 . 00

It's 9 o'clock



7 . 05

It's 5 past 7



2 . 30

It's half past 2



3 . 35

It's 25 to 4



3 . 20

It's 20 past 3



1 . 25

It's 25 past 1



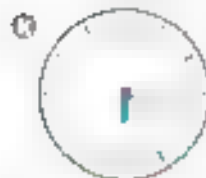
9 . 50

It's 10 to 10



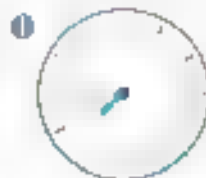
11 . 55

It's 5 to 12



6 . 20

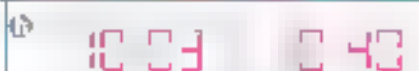
It's 20 past 6



7 . 45

It's quarter to 8

## 4 Calculate the elapsed time between the two clocks

Elapsed time **2 hours**Elapsed time **30 minutes**Elapsed time **4 hours**Elapsed time **40 minutes**Elapsed time **9 hours**Elapsed time **4 hours**Elapsed time **18 minutes**Elapsed time **37 minutes**Elapsed time **30 minutes**Elapsed time **15 minutes**

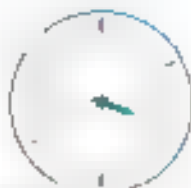


- 5 You leave school at 3 00 and when you get home, the clock is as shown:  
How many minutes did it take you to walk home?

20 minutes



- 6 If it takes you 45 minutes to walk home from school and you leave at 3 00, what time will it be when you get home? Draw the time on the clock.



- 7 Your mom put some muffins in the oven at 7 00. When you take them out, the clock is as shown.  
How many minutes did it take her to bake the muffins?

30 minutes



- 8 If Ahmed takes 30 minutes to go to the club from home, he leaves at 8 00, when will he arrive at the club? Draw the time on the clock.



- 9 Complete the following:



After  
7 hours



Before  
10 minutes



After  
hour



Before  
4 hours



After  
5 minutes



# Accumulative Assessment

## 12 up to Lesson 7

**First:** Choose the correct answer

a  $3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 =$

$3 \times 3$  ☒  $3 + 8$  ☐  $4 \times 6$

b  $720.072 \div 72 =$

$\text{€ } 220.000$  ☐  $7200$  ☒  $720$

c  $5 \times 8 = 10 =$

$(400 \div 40 \div 4)$

d The **value** of the digit 3 in 35.689 is

$300.000$  ☒  $30.000$  ☐  $3.000$

e The **largest** 5-digit number is

$\text{€ } 10.000$  ☐  $98\,765$  ☒  $99.999$

**Second:** Complete the following

a The number that comes just **after** 60.099 is **60 100**

b  $8 \times 5 =$  **5**  $\times 8$

c An hour = **60** minutes

d **8**  $\times 8 = 64$

e 60,020 (in word form) **Sixty thousand twenty**

**Third:** Answer the following.

a Arrange the following numbers in an ascending order

2,458 6,854 8,214 1,024 4,325

**1 024 2,458 4 325 6,854 8 214**

b If each T-shirt costs 7 LE how much do 9 T-shirts cost?

**$9 \times 7 = 63$  LE**

c The time is now **7:00**

What time will it be after 40 minutes?

Draw the time on the clock





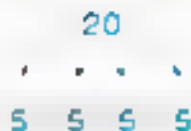
## Lessons 8&9

Answer the following questions.

- 1 There are 20 fish that need to be placed equally in 4 bowls. How many fish should be put in each bowl?

Draw a part-part-whole model to show your answer.

$$20 \div 4 = 5$$



- 2 The teacher has 18 crayons to be shared equally between 6 students. What is the share of each?

Draw a part-part-whole model to show your answer.

$$18 \div 6 = 3$$



- 3 Sarah has 20 oranges that need to be divided equally between 5 baskets.

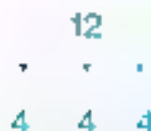
Draw a part-part-whole model to show your answer.

$$20 \div 5 = 4$$



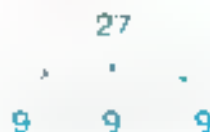
- 4** Eman is inviting 3 friends to a party. She has 12 cookies. How many cookies will each friend get?  
Draw a part-part-whole model to show your answer

$$12 \div 3 = 4$$



- 5** Judy has 27 pencils stored in boxes. If there are 3 boxes, how many pencils will be put in each box?  
Draw a part-part-whole model to show your answer

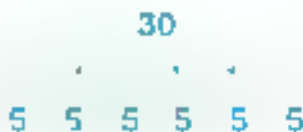
$$27 \div 3 = 9$$



- 6** There are 6 students in a class. There are 30 peanuts to be divided among them. If the peanuts are divided equally, how many peanuts does each student get?

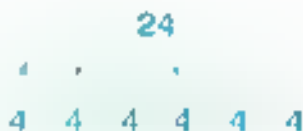
Draw a part part whole model to show your answer

$$30 \div 6 = 5$$



- 7** There are 24 insects, and each jackal must eat 6 insects. How many jackals will we feed?  
Draw a part-part-whole model to show your answer

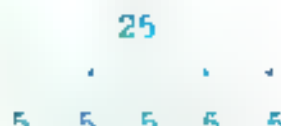
$$24 \div 6 = 4$$





- 8 There are 25 fish and each crocodile needs to eat 5 fish. How many crocodiles will we feed? Draw a part-part-whole model to show your answer.

$$25 \div 5 = 5$$



- 9 Each bull eats 2 bales of hay each day. If there are 100 bales, how many bulls can we feed? Draw a part-part-whole model to show your answer.

$$100 \div 2 = 50$$



#### 10 Divide:

Ⓐ  $6 \div 3 = 2$

Ⓑ  $45 \div 5 = 9$

Ⓒ  $81 \div 9 = 9$

Ⓓ  $32 \div 4 = 8$

Ⓔ  $72 \div 9 = 8$

Ⓕ  $18 \div 3 = 6$

Ⓖ  $48 \div 8 = 6$

Ⓗ  $54 \div 6 = 9$

Ⓘ  $24 \div 4 = 6$

Ⓚ  $63 \div 9 = 7$

Ⓛ  $15 \div 3 = 5$

Ⓜ  $56 \div 7 = 8$

Ⓝ  $8 \div 4 = 2$

Ⓟ  $28 \div 7 = 4$

Ⓡ  $36 \div 9 = 4$

Ⓢ  $25 \div 5 = 5$

## First: Choose the correct answer

- a The number that comes just after 25,099 is

25 100 ☒ 26,000 ☐ 25 098

- b  $6 + 6 + 6 + 6 + 6 =$

$5 + 6$  ☒  $3 \times 10$  ☐  $6 \times 6$

- c  $85\ 085 =$   $\times 85$

85 ☒ 850 ☐ 85,000

- d  $8 \times 5 =$   $\times 8$

(5) ☒ 8 ☐ 40 )

- e 1 3 5 and 15 are the factors of

3 ☐ 5 ☐ 15

## Second: Complete the following

- a Seventy-five thousand, nine hundred two = **75 902**

(in standard form)

- b  $10 + 10 + 10 + 10 + 10 =$  **5**  $\times 10 =$  **50**

The place value of 7 in 54 769 is **Hundreds**

- d The greatest 5-digit number is **98 765**

- e OX OXX OXXX **OOOO** XXXX

## Third: Answer the following:

- a Complete using <, = or >:

1  $7 \times 3$  <  $6 \times 4$

2  $95\ \text{Thousands} + 95$  >  $9\ 95$

3  $8 \times 0$  <  $1 \times 1$

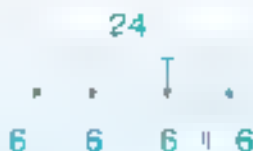
4  $3 + 3 + 3 + 3$  =  $6 \times 2$

- b Divide 24 apples equally between 4 baskets

Draw a part-part-whole model to

show your answer

**$24 \div 4 = 6$**



# Lesson 10

1 Find the missing factor in the triangles, then write the four equations to complete the fact family.

B

12

$$\begin{array}{l} 3 \times 4 = 12 \\ 4 \times 3 = 12 \\ 12 \div 3 = 4 \\ 12 \div 4 = 3 \end{array}$$

C

14

$$\begin{array}{l} 2 \times 7 = 14 \\ 7 \times 2 = 14 \\ 14 \div 2 = 7 \\ 14 \div 7 = 2 \end{array}$$

D

24

$$\begin{array}{l} 3 \times 8 = 24 \\ 8 \times 3 = 24 \\ 24 \div 3 = 8 \\ 24 \div 8 = 3 \end{array}$$

E

36

$$\begin{array}{l} 6 \times 6 = 36 \\ 36 \div 6 = 6 \end{array}$$

F

81

$$\begin{array}{l} 9 \times 9 = 81 \\ 81 \div 9 = 9 \end{array}$$

G

21

$$\begin{array}{l} 7 \times 3 = 21 \\ 3 \times 7 = 21 \\ 21 \div 3 = 7 \\ 21 \div 7 = 3 \end{array}$$

H

42

$$\begin{array}{l} 6 \times 7 = 42 \\ 7 \times 6 = 42 \\ 42 \div 6 = 7 \\ 42 \div 7 = 6 \end{array}$$

I

48

$$\begin{array}{l} 8 \times 6 = 48 \\ 6 \times 8 = 48 \\ 48 \div 6 = 8 \\ 48 \div 8 = 6 \end{array}$$

J

30

$$\begin{array}{l} 5 \times 6 = 30 \\ 6 \times 5 = 30 \\ 30 \div 5 = 6 \\ 30 \div 6 = 5 \end{array}$$

K

27

$$\begin{array}{l} 9 \times 3 = 27 \\ 3 \times 9 = 27 \\ 27 \div 3 = 9 \\ 27 \div 9 = 3 \end{array}$$

L

36

$$\begin{array}{l} 4 \times 9 = 36 \\ 9 \times 4 = 36 \\ 36 \div 9 = 4 \\ 36 \div 4 = 9 \end{array}$$

M

16

$$\begin{array}{l} 2 \times 8 = 16 \\ 8 \times 2 = 16 \\ 16 \div 2 = 8 \\ 16 \div 8 = 2 \end{array}$$

## 2 Divide:

$$\textcircled{A} 25 \div 5 = 5$$

$$\textcircled{B} 30 \div 5 = 6$$

$$\textcircled{C} 45 \div 5 = 9$$

$$\textcircled{D} 18 \div 9 = 2$$

$$\textcircled{E} 20 \div 5 = 4$$

$$\textcircled{F} 45 \div 5 = 3$$

$$\textcircled{G} 46 \div 6 = 6$$

$$\textcircled{H} 72 \div 8 = 9$$

$$\textcircled{I} 46 \div 4 = 4$$

$$\textcircled{J} 21 \div 7 = 3$$

## 3 Divide:

$$\textcircled{A} 7 \overline{) 6} \begin{array}{r} 4 \\ 3 \end{array}$$

$$\textcircled{B} 4 \overline{) 2} \begin{array}{r} 8 \end{array}$$

$$\textcircled{C} 3 \overline{) 24} \begin{array}{r} 5 \end{array}$$

$$\textcircled{D} 6 \overline{) 30} \begin{array}{r} 5 \end{array}$$

$$\textcircled{E} 3 \overline{) 6} \begin{array}{r} 2 \\ 4 \end{array}$$

$$\textcircled{F} 9 \overline{) 36} \begin{array}{r} 7 \end{array}$$

$$\textcircled{G} 4 \overline{) 28} \begin{array}{r} 1 \end{array}$$

$$\textcircled{H} 8 \overline{) 8} \begin{array}{r} 1 \end{array}$$

$$\textcircled{I} 5 \overline{) 10} \begin{array}{r} 2 \\ 4 \end{array}$$

$$\textcircled{J} 6 \overline{) 48} \begin{array}{r} 9 \end{array}$$

$$\textcircled{K} 3 \overline{) 27} \begin{array}{r} 9 \end{array}$$

$$\textcircled{L} 7 \overline{) 63} \begin{array}{r} 9 \end{array}$$

## 4 Divide:

$$\textcircled{A} \frac{40}{5} = 8$$

$$\textcircled{B} \frac{54}{9} = 6$$

$$\textcircled{C} \frac{72}{8} = 9$$

$$\textcircled{D} \frac{42}{6} = 7$$

$$\textcircled{E} \frac{63}{7} = 9$$

$$\textcircled{F} \frac{81}{9} = 9$$

$$\textcircled{G} \frac{45}{5} = 9$$

$$\textcircled{H} \frac{64}{8} = 8$$

$$\textcircled{I} \frac{48}{8} = 6$$



**5 Complete the following:**

a  $4 \div 2 = 2$

b  $9 \div 3 = 3$

c  $8 \div 4 = 2$

d  $12 \div 6 = 2$

e  $18 \div 3 = 6$

f  $32 \div 4 = 8$


g  $35 \div 7 = 5$

h  $40 \div 8 = 5$

i  $36 \div 6 = 6$

**6 Describe each of the following arrays using one multiplication problem and one division problem:**

a




$3 \times 5 = 15$   
 $15 \div 5 = 3$

b




$3 \times 4 = 12$   
 $12 \div 4 = 3$

c



$2 \times 6 = 12$   
 $12 \div 6 = 2$

d



$4 \times 6 = 24$   
 $24 \div 6 = 4$

## First: Choose the correct answer

The number that comes just before 20 500 is

20 499 ☒ 20 501 ☐ 10 500

$28 \div \quad = 7$

(3 ☒ 4) ☐ 5)

$6 \times 5 = \quad \times 10$

(5 ☒ 6) ☐ 3)

a  $8 + 8 + 8 =$

, 8 + 3 ☒ 6 + 4 ☐ (6 ☒ 4)

c Eighteen thousand eight hundred and eight =

18,808 ☒ 80,808 ☐ 18,860

## Second: Complete the following

= 25 Thousands + 105 Tens = 25 000 + 1 050 = 26,050

b  $56 \div 8 = 7$

c  $4 \times 5 = 5 + 5 + 5 + 5$

d The smallest 6-digit number is 100,000

e  $3 \times 3 = 36 \div 4$

## Third: Answer the following:

a Find the result

1  $7 \times 2 = 14$

2  $45 \div 5 = 9$

3  $5 \times 4 = 20$

4  $63 \div 9 = 7$

b Complete using (<, = or >)

1  $6 \times 6 > 4 + 9$

2  $18 \div 2 > 48 \div 6$

3  $4 + 4 + 4 + 4 = 2 \times 8$

4  $8 \div 8 < 1 \times 8$

c The price of each book is 8 pounds

How many books can you buy if you have 40 pounds?

$40 \div 8 = 5$  LE

# PUZZLE

- 1 Color the shapes on the grid and fill in the missing numbers if the **product** of the numbers in each shape is 16

Ex.



4	3	2	4	5	2	8	3
4	5	5	3	2	3	4	6
2	7	4	2	4	5	6	7
3	5	2	7	5	2	2	4
6	2	5	4	3	3	2	2

- 2 Match equal times.

- 1 Half an hour      2 A quarters of an hour      3 3 quarters of an hour  
 4 2 thirds of an hour      5 15 minutes  
 6 30 minutes      7 40 minutes      8 45 minutes  
 9 20 minutes      10 A third of an hour

- 3 Write a division equation to show how 36 sweets can be shared equally among.

- a 3 children  
 b 6 children  
 c 9 children  
 d 4 children



## Answers

6 2  
9 3

7 2  
2 3

8 2  
3 3

9 4  
5 2

10 1  
2 2

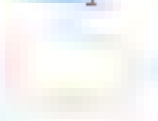
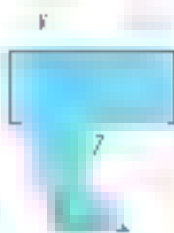
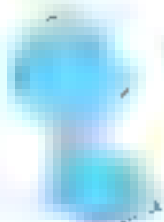
11 1  
2 2

# Chapter

# 4

## Lesson 1 Polygons

1 Color the polygon(s) only



2 Color the quadrilateral shape(s) (4 sides)

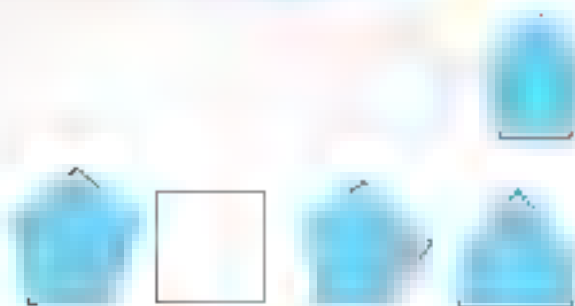


3 Color the triangle(s) (3 sides):



# Chapter 4

② Color the pentagon(s) (5 sides):



③ Color the hexagon(s) (6 sides):



④ Draw a shape with 3 sides:



Name

Triangle

⑤ Draw a shape with 4 sides:



Name

Quadrilateral

⑥ Draw a shape with 5 sides:



Name

pentagon

⑦ Draw a shape with 6 sides:



Name

hexagon

## 3 Complete.

- ☐ The triangle has **3** sides, **3** angles and **3** vertices.  
☐ The octagon has **8** sides, **8** angles, and **8** vertices.  
☐ The pentagon has **5** sides, **5** angles and **5** vertices.  
☐ The hexagon has **6** sides, **6** angles, and **6** vertices.  
☐ The **pentagon** has 5 sides, but the **hexagon** has 6 sides.  
☐ The **heptagon** has 7 sides, but the **triangle** has 3 sides.  
☐ The **octagon** has **8** angles, but the **heptagon** has 7 sides.  
☐ The **triangle** has **3** angles, but the **quadrilateral** has 4 angles.

## 4 Write down the name of each polygon.

a



Triangle

b



Quadrilateral

c



Pentagon

d



Hexagon

e



Heptagon

f



Octagon

# Accumulative Assessment

# 15

## Chapter 4

**First:** Choose the correct answer:

- a. 10 Thousands + 10 Hundreds + 10 Tens =  
 $101\ 010$  ☒  $11\ 100$  ☐  $10\ 110$
- b.  $8 + 8 + 8 + 8 =$   
 $8 \times 8$  ☒  $8 + 4$  ☐  $8 \times 4$
- c. The quadrilateral has \_\_\_\_\_ sides  
 $3$  ☒  $4$  ☐  $5$
- d. 5 cm = \_\_\_\_\_ mm  
 $500$  ☒  $50$  ☐  $5$
- e. An hour + 10 minutes = \_\_\_\_\_ minutes  
 $110$  ☒  $130$  ☐  $70$

**Second:** Complete the following

- a. The **polygon** that has 5 angles is called **pentagon**
- b.  $5 \times 8 = 8 + 8 + 8 + 8 + 8$
- c.  $20\ 015 = 20\ 000 + 10 + 5$
- d. The **smallest** 5-digit number that can be formed from the digits 3, 8 and 7 is **33,378**
- e.  $70\ 63\ 56\ 49\ 42 + 35 = 28$

**Third:** Answer the following:

a. Find the result:

- ①  $40\ 000 + 500 + 60 + 7 = 40\ 562$       ②  $0 \times 8 = 0$
- ③  $6 + 6 + 6 + 6 + 6 = 30$       ④  $56 \div 8 = 7$

b. Write the time shown on the clock:

- ①  20 past 9
- ②  Quarter to 11

If each pen costs 9LE, how many pens can you buy with 63LE?

$$63 \div 9 = 7 \text{ pens}$$



# Lesson 2 Properties of Quadrilaterals

1 Write the name of each quadrilateral.

a



Parallelogram

b



Rectangle

c



Kite

d



Square

e



Trapezoid

f



Rhombus

2 Match each quadrilateral to its name.

a

Kite

\*

\*

1

b

Parallelogram

\*

\*

2

c

Trapezoid

\*

\*

3

d

Rectangle

\*

\*



4

e

Rhombus

\*

\*



5

f

Square

\*

\*



6

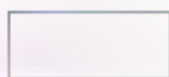


3 Match the following quadrilaterals with their compatible properties. (Could be one quadrilateral or more)



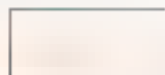
a Each two opposite sides are parallel and all sides are equal

b Each two opposite sides are equal and parallel



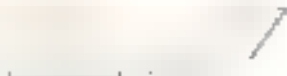
c All angles are equal and each angle is a right angle

d Each two opposite angles are equal



e One pair of opposite angles is equal and two pairs of adjacent sides are equal

f Only one pair of opposite sides is parallel



4 Complete.

- ① The **quadrilateral** is a polygon that has **4** sides.
- ② Each two opposite sides are equal and parallel in **parallelogram**, **square**, **rectangle** and **rhombus**.
- ③ All sides are equal in **square** and **rhombus**.
- ④ All angles are equal in **square** and **rectangle**.
- ⑤ Only one pair of opposite sides is parallel in **trapezoid**.
- ⑥ Two pairs of adjacent sides are equal in **kite**.
- ⑦ In the **parallelogram**, each two opposite sides are **equal in length**.
- ⑧ In the **rectangle**, all angles are **right**.
- ⑨ In the **square**, all sides are **equal** and all angles are **right**.
- ⑩ In the **trapezoid**, only one pair of opposite sides is **parallel**.
- ⑪ In the **kite**, two pairs of adjacent sides are **equal**.

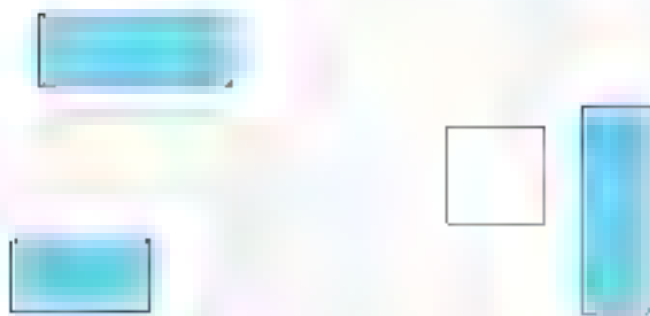
5 Color the parallelogram(s):



# 6 Color the trapezium(s)



# 7 Color the rectangle(s):



# 8 Color the kite(s)



# Accumulative Assessment

# 16



## Chapter 6

**First:** Choose the correct answer

- Each two opposite sides are parallel in the square ☒ trapezium ☐ kite
- The quadrilateral has 4 angles. ☒ 3 ☐ 4 ☐ 5  
 $9 + 9 + 9 + 9 = 36$  ☒  $(9 \times 9)$  ☐  $9 \times 9$  ☐  $9 + 9$
- $9 \times 10 = 90$  ☒  $9 \times 9$  ☐  $(10 \times 9)$  ☐  $9 + 90$
- The value of the digit 5 in 50 112 is 50,000 ☒ 5,000 ☐ 500

**Second:** Complete the following

- 45 Thousands + 10 Hundreds + 5 Ones = 46,005
- The hexagon has 6 sides  
 All angles are right angles in square and rectangle
- An hour = 60 minutes
- 2 m = 200 cm

**Third:** Answer the following:

- Find the result:  
 $56 - 35 = 21$  ☒  $72 + 9 = 81$  ☐  
 $8 \times 5 = 40$  ☒  $50,000 + 500 + 5 = 50,505$  ☐

Write down the name of each quadrilatera



Parallelogram



Kite



Rectangle



Trapezoid

Each week has 7 days. How many days are there in 8 weeks?

$$7 \times 8 = 56 \text{ days}$$

# Lesson 3 Area

## 1 Find the area of each shape:

a



Number of rows = 4 rows  
 Number of columns = 7 columns  
 Area = 4 X 7  
 = 28 square units

b



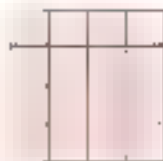
Number of rows = 3 rows  
 Number of columns = 7 columns  
 Area = 3 X 7  
 = 21 square units

c



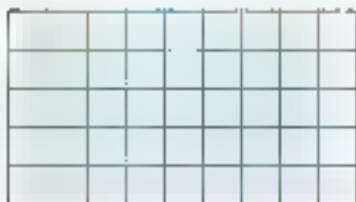
Number of rows = 4 rows  
 Number of columns = 6 columns  
 Area = 4 X 6  
 = 24 square units

d



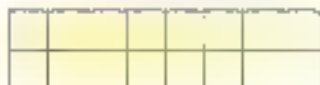
Number of rows = 4 rows  
 Number of columns = 4 columns  
 Area = 4 X 4  
 = 16 square units

e



Number of rows = 5 rows  
 Number of columns = 9 columns  
 Area = 5 X 9  
 = 45 square units

f



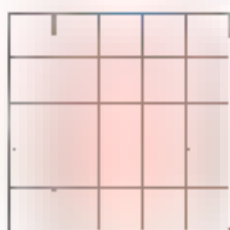
Number of rows = 2 rows  
 Number of columns = 8 columns  
 Area = 2 X 8  
 = 16 square units

①



$$\begin{aligned}\text{Length} &= 6 \text{ units} \\ \text{Width} &= 4 \text{ units} \\ \text{Area} &= 6 \times 4 \\ &= 24 \text{ square units}\end{aligned}$$

②



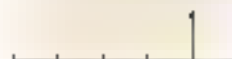
$$\begin{aligned}\text{Length} &= 5 \text{ units} \\ \text{Width} &= 5 \text{ units} \\ \text{Area} &= 5 \times 5 \\ &= 25 \text{ square units}\end{aligned}$$

③



$$\begin{aligned}\text{Length} &= 5 \text{ units} \\ \text{Width} &= 3 \text{ units} \\ \text{Area} &= 5 \times 3 \\ &= 15 \text{ square units}\end{aligned}$$

④



$$\begin{aligned}\text{Length} &= 5 \text{ units} \\ \text{Width} &= 2 \text{ units} \\ \text{Area} &= 5 \times 2 \\ &= 10 \text{ square units}\end{aligned}$$

⑤



$$\begin{aligned}\text{Length} &= 8 \text{ units} \\ \text{Width} &= 4 \text{ units} \\ \text{Area} &= 8 \times 4 \\ &= 32 \text{ square units}\end{aligned}$$

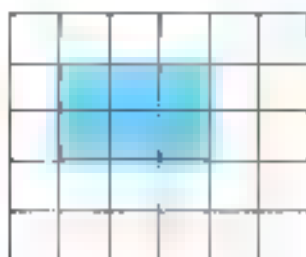
⑥



$$\begin{aligned}\text{Length} &= 8 \text{ units} \\ \text{Width} &= 3 \text{ units} \\ \text{Area} &= 8 \times 3 \\ &= 24 \text{ square units}\end{aligned}$$

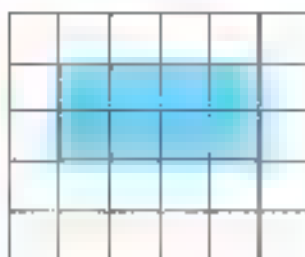
2 Use the grid to draw a rectangle representing each of the following multiplication sentences, then calculate the area.

a



$$2 \times 3 = 6 \quad \square$$

b



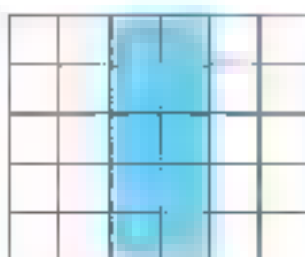
$$2 \times 4 = 8 \quad \square$$

c



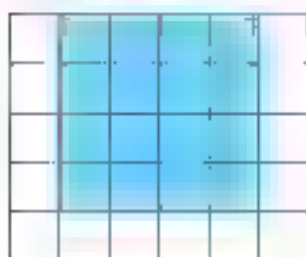
$$3 \times 4 = 12 \quad \square$$

d



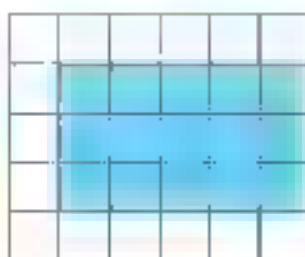
$$5 \times 2 = 10 \quad \square$$

e



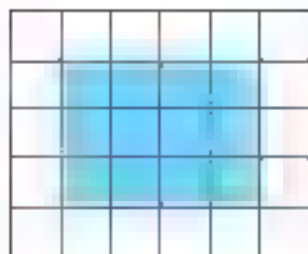
$$4 \times 4 = 16 \quad \square$$

f



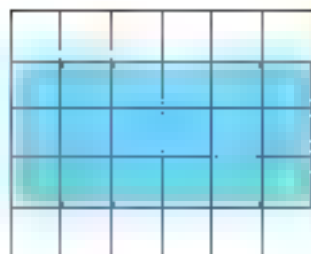
$$3 \times 5 = 15 \quad \square$$

⑤



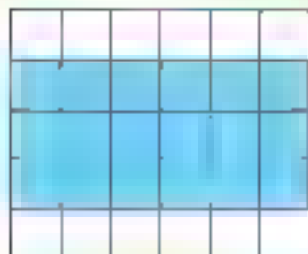
$$3 \times 4 = 12 \quad \square$$

⑥



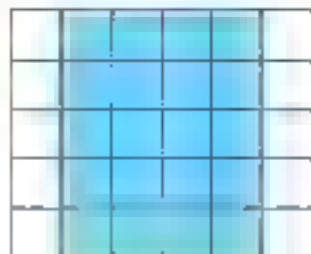
$$3 \times 6 = 18 \quad \square$$

⑦



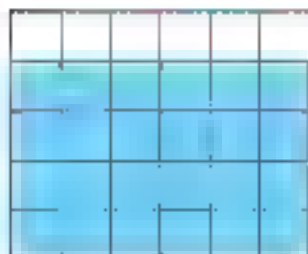
$$6 \times 3 = 18 \quad \square$$

⑧



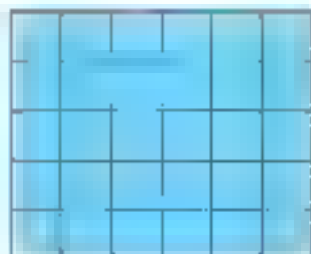
$$5 \times 4 = 20 \quad \square$$

⑨



$$6 \times 4 = 24 \quad \square$$

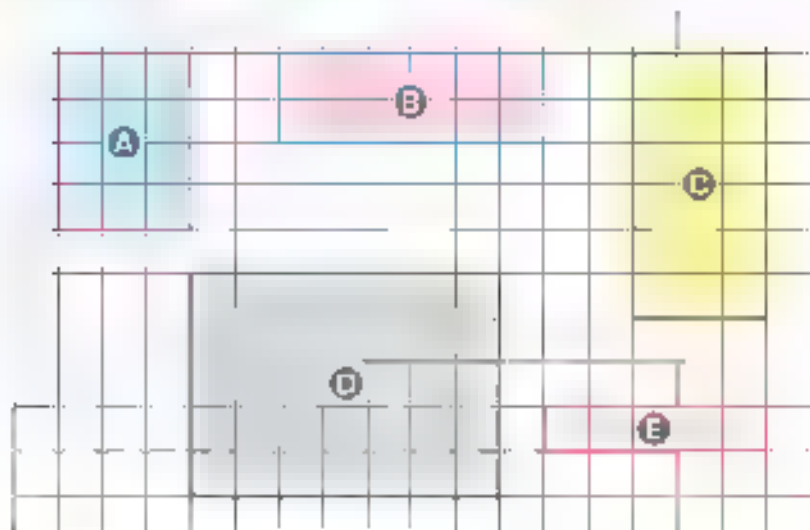
⑩



$$5 \times 6 = 30 \quad \square$$



### 3 Determine the total area of the following shapes.



Area of shape **A**      $3 \times 4 = 12$

Area of shape **B**      $2 \times 6 = 12$

Area of shape **C**      $6 \times 3 = 18$

Area of shape **D**      $5 \times 7 = 35$

Area of shape **E**      $1 \times 5 = 5$

The total area =  $\overset{\text{A}}{12} + \overset{\text{B}}{12} + \overset{\text{C}}{18} + \overset{\text{D}}{35} + \overset{\text{E}}{5}$   
 $= 82$

# Accumulative Assessment

# 17



## Chapter 6

**First:** Choose the correct answer

- a Nine thousand and ninety =  $9,090$  ☐  $90,090$  ☒  $900,090$
- b The rhombus has \_\_\_\_\_ angles  $3$  ☐  $4$  ☒  $5$   
An hour = \_\_\_\_\_ minutes  $15$  ☐  $60$  ☒  $30$
- d  $5 \times 4 =$   $5+5+5+5+5$  ☐  $4+4+4+4$  ☒  $10 \div 10$
- e The largest 6 digit number is  $999,999$  ☒  $987,654$  ☐  $900,000$

**Second:** Complete the following

- a 5 Tens + 45 Thousands + 5 Hundreds = **45,550**
- b The pentagon has **5** sides
- c 20 mm = **2** cm
- d In the square, all angles are **equal** in measure  
= 27, 36, 45, 54, **63**, **72**, **81**

**Third:** Answer the following:

a Complete using (<, = or >)

- ①  $6 \times 7$  >  $5 \times 8$       ② 2 hours > 100 minutes
- ③  $7896$  >  $7986$       ④ 20 cm > 20 mm

b Find the area of each shape:

①



Area = **16**  
square units

②



Area = **20**  
square units

③



Area = **24**  
square units

# **Lessons 4&5 Rectangles with Equal Area, Area Using Models**

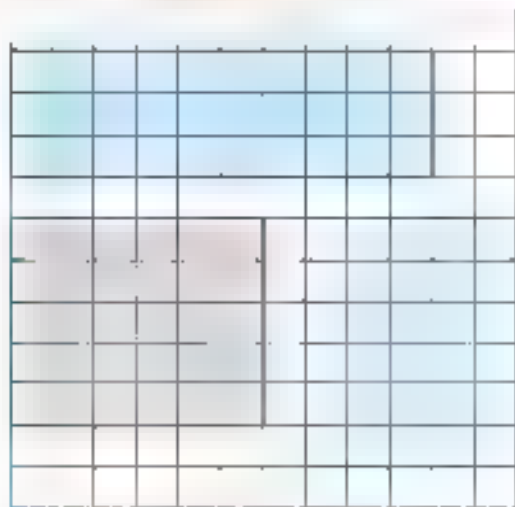
- On the grid below, draw and label as many rectangles as you can with the given area. Then write equations that match your rectangles

Ⓐ 30 square units

$$30 = 3 \times 10$$

$$30 = 5 \times 6$$

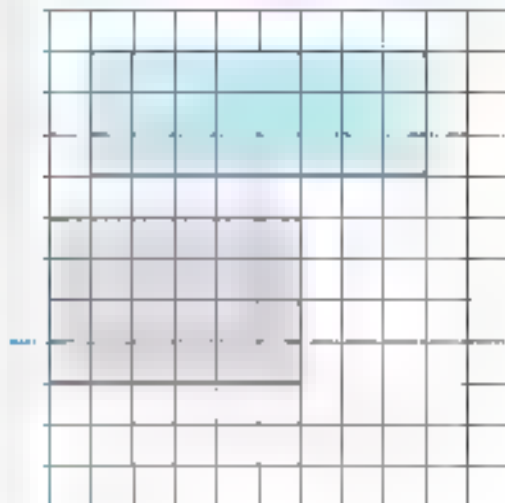
$$30 = 6 \times 5$$



Ⓑ 24 square units

$$24 = 3 \times 8$$

$$24 = 4 \times 6$$



© 20 square units

$$20 = 2 \times 10$$

$$20 = 4 \times 5$$

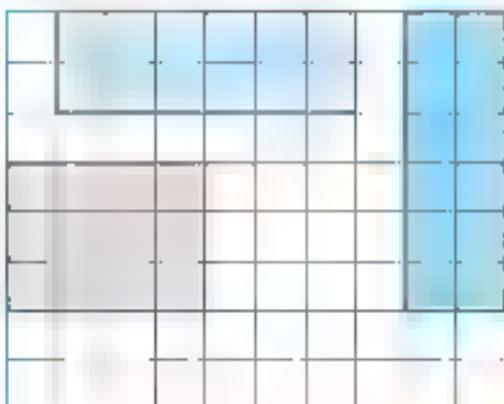


© 12 square units

$$12 = 2 \times 6$$

$$12 = 3 \times 4$$

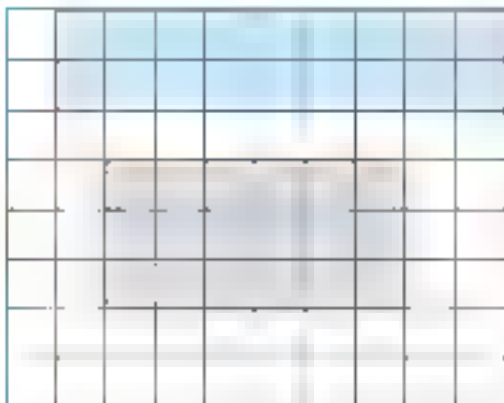
$$12 = 6 \times 2$$



© 18 square units

$$18 = 2 \times 9$$

$$18 = 3 \times 6$$



## 2 Find the area of each shape.

a



$$\begin{aligned}\text{Area} &= 4 \times 3 \\ &= 12 \text{ square units}\end{aligned}$$

b



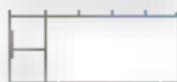
$$\begin{aligned}\text{Area} &= 2 \times 6 \\ &= 12 \text{ square units}\end{aligned}$$

c



$$\begin{aligned}\text{Area} &= 4 \times 8 \\ &= 32 \text{ square units}\end{aligned}$$

d



$$\begin{aligned}\text{Area} &= 3 \times 5 \\ &= 15 \text{ square units}\end{aligned}$$

e



$$\begin{aligned}\text{Area} &= 5 \times 5 \\ &= 25 \text{ square units}\end{aligned}$$

f



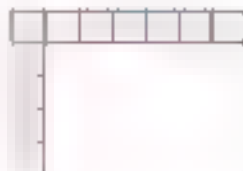
$$\begin{aligned}\text{Area} &= 2 \times 8 \\ &= 16 \text{ square units}\end{aligned}$$

g



$$\begin{aligned}\text{Area} &= 5 \times 10 \\ &= 50 \text{ square units}\end{aligned}$$

h



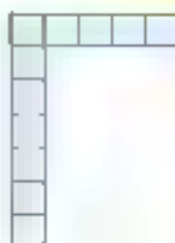
$$\begin{aligned}\text{Area} &= 5 \times 7 \\ &= 35 \text{ square units}\end{aligned}$$

1



$$\begin{aligned} \text{Area} &= 7 \times 8 \\ &= 56 \text{ square units} \end{aligned}$$

2



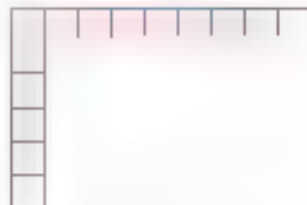
$$\begin{aligned} \text{Area} &= 7 \times 5 \\ &= 35 \text{ square units} \end{aligned}$$

3



$$\begin{aligned} \text{Area} &= 4 \times 9 \\ &= 36 \text{ square units} \end{aligned}$$

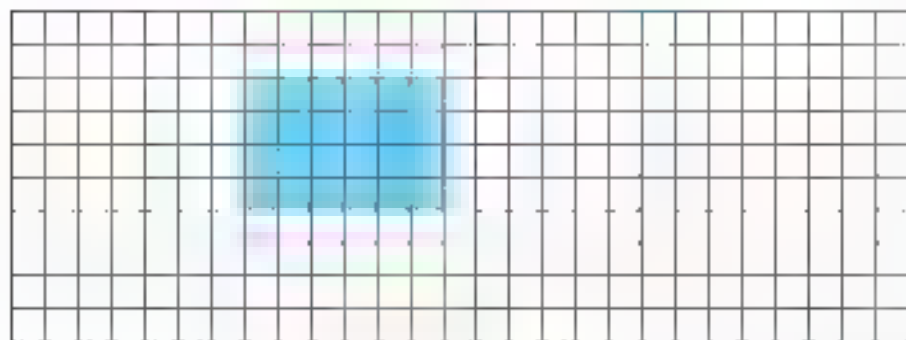
4



$$\begin{aligned} \text{Area} &= 6 \times 9 \\ &= 54 \text{ square units} \end{aligned}$$

- 3 Yousef loves watermelon and wants to plant it in his garden. Watermelon needs 1 square unit of space. He would like the garden to have 4 rows with 6 square units in each row. How many watermelons can Yousef fit in his garden? What is the area of his garden in square units?

$$4 \times 6 = 24$$



## 18



**First:** Choose the correct answer:

$$\frac{1}{2} + \frac{1}{3} + \frac{1}{6} =$$

$$4 \times 6 \div 3 + 8 \div 8 \times 8$$

$$= 85 + 0.0085$$

5.858 5.857 5.856 5.855

✓ The hexagon has \_\_\_\_\_ sides

4 92 - 9

( 1015 )

e The value of the digit 4 in 24937 is

40 40 40 40 40

**Second:** Complete the following

2. The place value of the digit 3 in 203 is **Ones**.

$$L: 8 \text{ Ones} + 6 \text{ Thousands} + 6 \text{ Tens} = 63\,068$$

$$6 \times 3 = 3 \times 6$$

7 7 7 7 7

• The **factors** of the number 8 are 1, 2, 4, and 8.

**Third:** Answer the following:

a Arrange the following numbers in a descending order

75.407 . 75.704 . 75.074 . 75.470 . 75.740

25.420    25.402    25.240    25.204    25.024

b. Find the result.

①  $2 \times 3 = 6$

2  $74 + 3 = 8$

3 3



64

9

- Find the area of the opposite shape

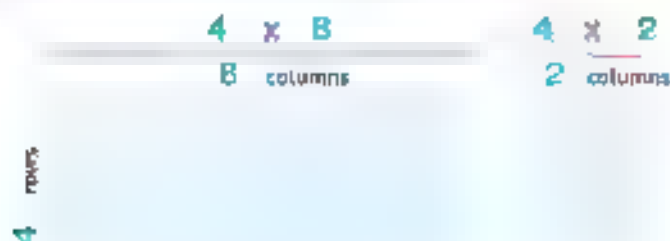
$$\begin{aligned} \text{Area} &= 4 \times 7 \\ &= 28 \text{ square units} \end{aligned}$$



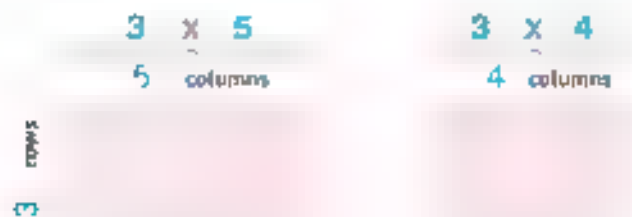
# Lessons 6&7 Area by Splitting Arrays – Distributive Property on Multiplication

6&amp;7

## 1 Complete using the Distributive Property



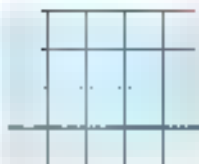
$$\begin{aligned} 4 \times 10 &= 4 \times 8 + 4 \times 2 \\ &= 32 + 8 = 40 \end{aligned}$$



$$\begin{aligned} 3 \times 9 &= 3 \times 5 + 3 \times 4 \\ &= 15 + 12 = 27 \end{aligned}$$



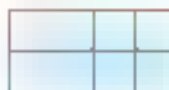
③



$$4 \times 3 + 4 \times 5$$

$$= 12 + 20 = 32$$

④



$$2 \times 4 + 2 \times 3$$

$$= 8 + 6 = 14$$

⑤



$$5 \times 2 + 5 \times 4$$

$$= 10 + 20 = 30$$

⑥



$$(3 \times 3) + (3 \times 2)$$

$$= 9 + 6 = 15$$

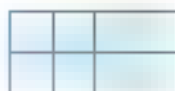
⑦



$$4 \times 3 + 4 \times 4$$

$$= 12 + 16 = 28$$

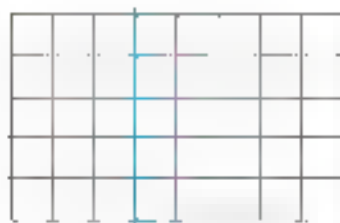
⑧



$$2 \times 4 + 2 \times 2$$

$$= 8 + 4 = 12$$

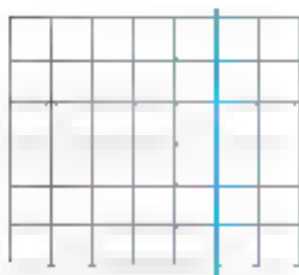
2 Divide the following arrays according to the Distributive Property



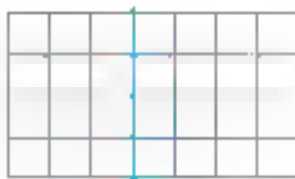
Ⓐ  $5 \times 8 = (5 \times 3) + (5 \times 5)$



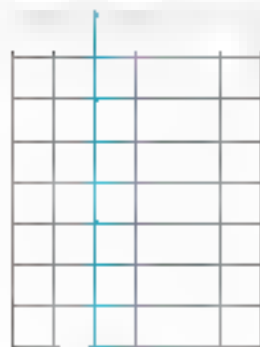
Ⓑ  $4 \times 9 = (4 \times 2) + (4 \times 7)$



Ⓒ  $6 \times 7 = (6 \times 5) + (6 \times 2)$



Ⓓ  $4 \times 7 = (4 \times 3) + (4 \times 4)$

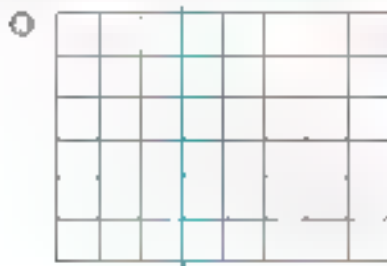


Ⓔ  $8 \times 6 = (8 \times 2) + (8 \times 4)$



Ⓕ  $2 \times 8 = (2 \times 5) + (2 \times 3)$

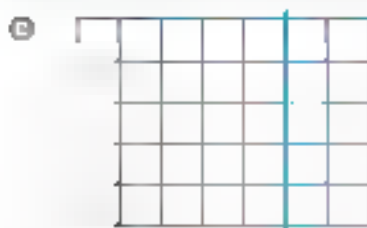
- 3** Divide the following arrays, then use the Distributive Property.  
 (There is more than one answer.)



$$\begin{aligned} & 6 \times 3 + 6 \times 2 \\ & = 18 + 12 = 30 \end{aligned}$$



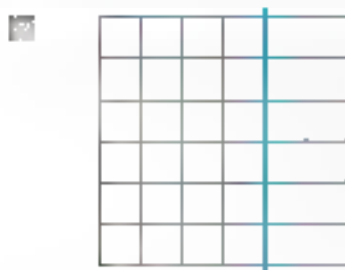
$$\begin{aligned} & 3 \times 2 + 3 \times 2 \\ & = 6 + 6 = 12 \end{aligned}$$



$$\begin{aligned} & (5 \times 3) + (5 \times 2) \\ & = 15 + 10 = 25 \end{aligned}$$



$$\begin{aligned} & (2 \times 2) + (2 \times 2) \\ & = 4 + 4 = 8 \end{aligned}$$



$$\begin{aligned} & (6 \times 2) + (6 \times 2) \\ & = 12 + 12 = 24 \end{aligned}$$



$$\begin{aligned} & (4 \times 2) + (4 \times 1) \\ & = 8 + 4 = 12 \end{aligned}$$

4 Complete the following:

$$\textcircled{A} 4 \times 8 = 4 \times 5 + 4 \times 3 = 20 + 12 = 32$$

$$\textcircled{B} 5 \times 9 = 5 \times 5 + 5 \times 4 = 25 + 20 = 45$$

$$\textcircled{C} 5 \times 6 = 5 \times 4 + 5 \times 2 = 20 + 10 = 30$$

$$\textcircled{D} 3 \times 8 = 3 \times 5 + 3 \times 3 = 15 + 9 = 24$$

$$\textcircled{E} 7 \times 6 = 7 \times 2 + 7 \times 4 = 14 + 28 = 42$$

$$\textcircled{F} 8 \times 7 = (8 \times 3 + 8 \times 4) = 24 + 32 = 56$$

$$\textcircled{G} 6 \times 9 = 6 \times 4 + 6 \times 5 = 24 + 30 = 54$$

$$\textcircled{H} 3 \times 7 = 3 \times 4 + 3 \times 3 = 12 + 9 = 21$$

$$\textcircled{I} 4 \times 8 = (4 \times 3 + 4 \times 5) = 12 + 20 = 32$$

5 Complete the following: (As in the example):

**Ex.**  $8 \times 17 = 8 \times (10 + 7) = 8 \times 10 + 8 \times 7 = 80 + 56 = 136$

$$\begin{aligned} \textcircled{A} 7 \times 13 &= 7 \times (10 + 3) = (7 \times 10) + (7 \times 3) \\ &= 70 + 21 = 91 \end{aligned}$$

$$\begin{aligned} \textcircled{B} 4 \times 12 &= 4 \times (10 + 2) = 4 \times 10 + 4 \times 2 \\ &= 40 + 8 = 48 \end{aligned}$$

$$\begin{aligned} \textcircled{C} 9 \times 13 &= 9 \times (10 + 3) = 9 \times 10 + 9 \times 3 \\ &= 90 + 27 = 117 \end{aligned}$$

$$\begin{aligned} \textcircled{D} 8 \times 15 &= 8 \times (10 + 5) = 8 \times 10 + 8 \times 5 \\ &= 80 + 40 = 120 \end{aligned}$$

## 19



**First:** Choose the correct answer:

- Nineteen thousand, nine hundred and nine =

19 749 6 94 909 6 19 990

$$7 \times 10 + 0 + 0 + 7 =$$

707 007 5 7007 0 707 0

$$5 \quad 7 + 7 + 7 + 7 + 7 =$$

$7 \times 7 \times 7 \times 5 \times 7 + 5$

4. 4x2 =

2 + 4 + 4 + 4 + 4

- c The value of the digit 8 is 308.964.

600.000 60.000 6.000

**Second:** Complete the following:

$\square \triangle \square$      $\square \triangle$

$$G \times 2 = \{ 6, 15 \} \quad \{ 6, 1 \}$$

7 x 6 = 6 x 7

- The number **57,000** comes just after 56,999.

$$e \text{ 700 Thousands} + 1 \text{ Hundreds} + 08 \text{ Tens} = 701,280$$

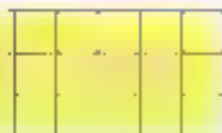
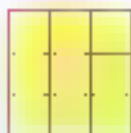
**Third:** Answer the following

- d. Arrange the following numbers in an ascending order

75.050      75.005      75.500      75.505      75.055

75.005 75.050 75.055 75.500 75.505

- b. Complete using the Distributive Property



$$3 \times 9 = 3 \times 3 + (3 \times 6)$$

$$= 9 + 18 = 27$$

# PUZZLE

1 Write the perimeter of the given figure.



2 Write operations about the picture.



7 X

7 X

= 7 X

=



7 X

, + 7 X

+

=

Answers

The perimeter =  $0 + 4 + 5 + 0 + 4 + 5 = 10$  cm  
 $86 - 56 + 29 = 59$  cm,  $+ 59$  cm,  $= 118$  cm

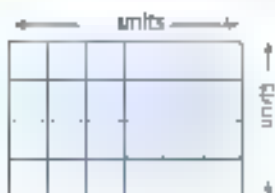


5

## 1 Perimeter of Polygons

1 Find the perimeter of each shape.

a



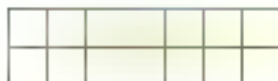
$$\begin{aligned}\text{Perimeter} &= 6 + 4 + 6 + 4 \\ &= 20 \text{ units}\end{aligned}$$

b



$$\begin{aligned}\text{Perimeter} &= 5 + 5 + 5 + 5 \\ &= 20 \text{ units}\end{aligned}$$

c



$$\begin{aligned}\text{Perimeter} &= 7 + 2 + 7 + 2 \\ &= 18 \text{ units}\end{aligned}$$

d



$$\begin{aligned}\text{Perimeter} &= 4 + 4 + 4 + 4 \\ &= 16 \text{ units}\end{aligned}$$

e



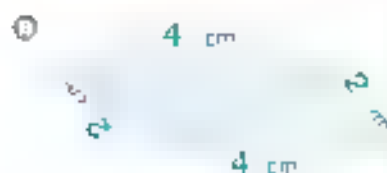
$$\begin{aligned}\text{Perimeter} &= 8 + 5 + 8 + 5 \\ &= 26 \text{ units}\end{aligned}$$

f



$$\begin{aligned}\text{Perimeter} &= 8 + 3 + 8 + 2 \\ &= 22 \text{ units}\end{aligned}$$

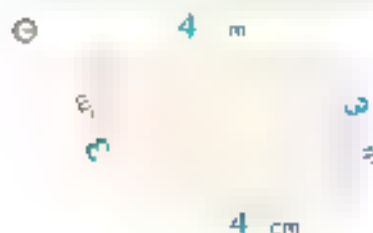
- 2 Use your ruler to measure each of the side lengths of the following quadrilaterals, then find the perimeter



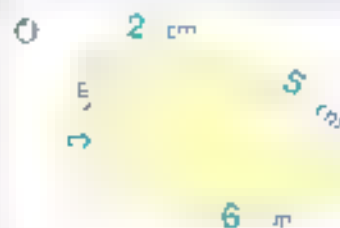
$$\begin{aligned}\text{Perimeter} &= 4 + 2 + 4 + 2 \\ &= 12 \text{ cm}\end{aligned}$$



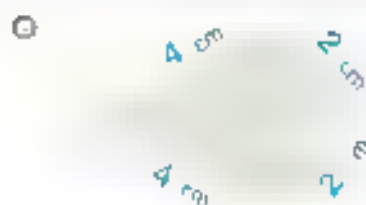
$$\begin{aligned}\text{Perimeter} &= 5 + 3 + 3 + 2 \\ &= 13 \text{ cm}\end{aligned}$$



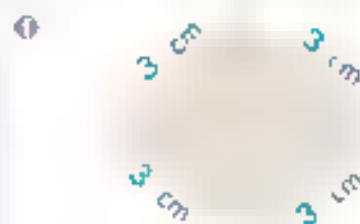
$$\begin{aligned}\text{Perimeter} &= 4 + 3 + 4 + 3 \\ &= 14 \text{ cm}\end{aligned}$$



$$\begin{aligned}\text{Perimeter} &= 3 + 2 + 5 + 6 \\ &= 16 \text{ cm}\end{aligned}$$



$$\begin{aligned}\text{Perimeter} &= 4 + 4 + 2 + 2 \\ &= 12 \text{ cm}\end{aligned}$$



$$\begin{aligned}\text{Perimeter} &= 3 + 3 + 3 + 3 \\ &= 12 \text{ cm}\end{aligned}$$





- 3 Use your ruler to measure each of the side lengths of the following quadrilaterals, then find the perimeter

Ⓐ Perimeter

$$= 6 + 3 + 6 + 3$$

$$= 18 \text{ cm}$$



Ⓑ Perimeter

$$= 6 + 2 + 6 + 2$$

$$= 16 \text{ cm}$$



Ⓒ Perimeter

$$= 6 + 5 + 6 + 5$$

$$= 22 \text{ cm}$$

Ⓓ Perimeter

$$= 3 + 3 + 3 + 3$$

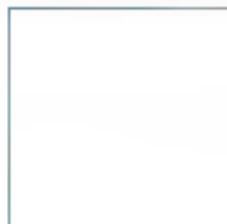
$$= 12 \text{ cm}$$



Ⓔ Perimeter

$$= 4 + 4 + 4 + 4$$

$$= 16 \text{ cm}$$



### First: Choose the correct answer

- a. The **value** of the digit 7 in 25 748 is ( 700,000 ☐ 7,000 ☒ 700 )
- b. The number of sides of the **pentagon** is 4 ☐ 5 ☒ 6
- c.  $8 + 8 + 8 =$   $8 + 3$  ☐  $6 \times 4$  ☒  $8 \times 8$
- d. The number that comes just **before** 200 100 is 200,000 ☐ 100 100 ☒ 200,099
- e.  $2\text{ m} =$  ( 20 ☐ 200 ☒ 2,000 ) cm

### Second: Complete the following

- a. 74 Thousands + 5 Ones + 7 Tens + 3 Hundreds = **74,375**
- b. 120 minutes = **2** hour(s)
- c.  $8 \times 5 =$  **8 + 8 + 8 + 8 + 8**
- d. In the **rhombus**, all sides are **equal**.  $36 \div 9 =$  **4**

### Third: Answer the following.

- a. Find the **perimeter** of the opposite figure

Perimeter

$$= 3 + 7 + 3 + 7 = 20 \text{ length units}$$



- b. Write the time shown on the clock.

①



**25 past 2**

②

**11:15**

**Quarter past 11**

Write down the **name** of each shape

①

**Parallelogram**

②

**Kite**

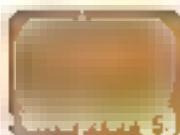
③



**Rectangle**

④

**Trapezoid**



## 2-4 Perimeter and Area Area Using the Dimensions Area Using Different Strategies

### 1 Find the area and perimeter of each shape

Ⓐ Area =  $4 \times 6 = 24$  square units

$$\begin{aligned}\text{Perimeter} &= 4 + 6 + 4 + 6 \\ &= 20 \text{ length units}\end{aligned}$$



Ⓑ Area =  $5 \times 4 = 20$  square units

$$\begin{aligned}\text{Perimeter} &= 4 + 5 + 4 + 5 \\ &= 18 \text{ length units}\end{aligned}$$



Ⓒ Area =  $2 \times 6 = 12$  square units

$$\begin{aligned}\text{Perimeter} &= 2 + 6 + 2 + 6 \\ &= 16 \text{ length units}\end{aligned}$$



Ⓓ Area =  $4 \times 4 = 16$  square units

$$\begin{aligned}\text{Perimeter} &= 4 + 4 + 4 + 4 \\ &= 16 \text{ length units}\end{aligned}$$



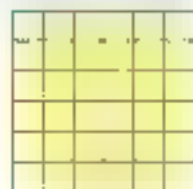
Ⓔ Area =  $5 \times 5 = 25$  square units

$$\begin{aligned}\text{Perimeter} &= 5 + 5 + 5 + 5 \\ &= 20 \text{ length units}\end{aligned}$$

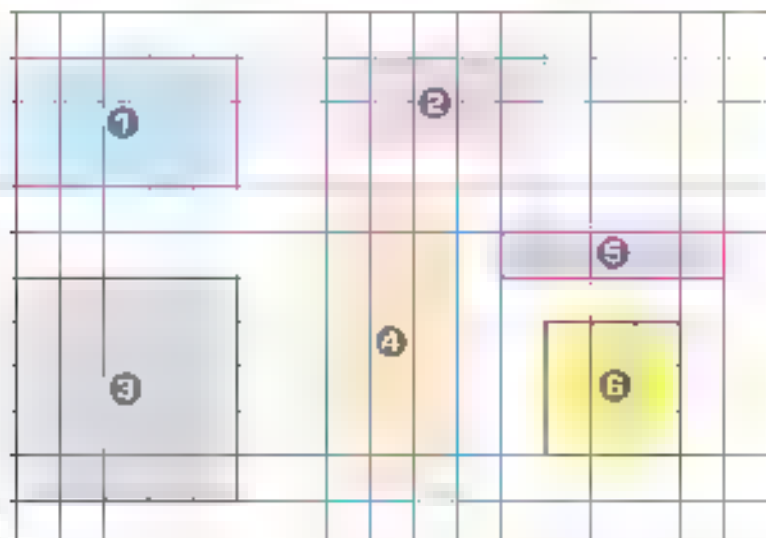


Ⓕ Area =  $6 \times 6 = 36$  square units

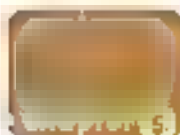
$$\begin{aligned}\text{Perimeter} &= 6 + 6 + 6 + 6 \\ &= 24 \text{ length units}\end{aligned}$$



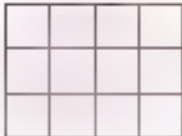



2 Look at the following grid and complete the table.



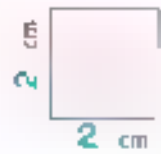
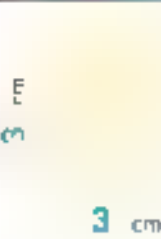


Shape	Perimeter	Area
1	$3 + 5 + 3 + 5 = 16$ length units	$3 \times 5 = 15$ square units
2	$2 + 5 + 2 + 5 = 14$ length units	$2 \times 5 = 10$ square units
3	$5 + 5 + 5 + 5 = 20$ length units	$5 \times 5 = 25$ square units
4	$7 + 3 + 7 + 3 = 20$ length units	$7 \times 3 = 21$ square units
5	$1 + 5 + 1 + 5 = 12$ length units	$1 \times 5 = 5$ square units
6	$3 + 3 + 3 + 3 = 12$ length units	$3 \times 3 = 9$ square units



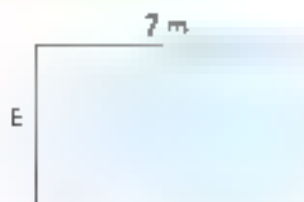
**3** Find the area of each shape using two different strategies.

Shape	First Strategy	Second Strategy
<p>Q</p> 	$4 + 4 + 4 = 12$	$3 \times 4 = 12$
Area = 12 square units	Area = 12 square units	
	$4 + 4 + 4 + 4$	$4 \times 4 = 16$
Area = 16 square units	Area = 16 square units	
<p>Q</p> 	$4 + 4 = 8$	$2 \times 4 = 8$
Area = 8 square units	Area = 8 square units	
	$3 \times 3 = 9$	$3 + 3 + 3 = 9$
Area = 9 square units	Area = 9 square units	

Shape	First Strategy	Second Strategy
③ 	$4 \times 3 = 12$ Area = 12 square cm	$3 + 3 + 3 + 3 = 12$ Area = 12 square cm
④ 	$4 \times 2 = 8$ Area = 8 square cm	$2 + 2 + 2 + 2 = 8$ Area = 8 square cm
⑤ 	$2 \times 2 = 4$ Area = 4 square cm	$2 + 2 = 4$ Area = 4 square cm
⑥ 	$3 \times 3 = 9$ Area = 9 square cm	$3 + 3 + 3 = 9$ Area = 9 square cm

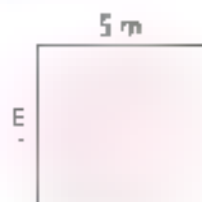
## 4 Find the area of each of the following rectangles.

a



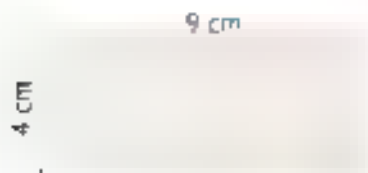
$$\begin{aligned}\text{Area} &= 7 \times 5 \\ &= 35 \text{ square m}\end{aligned}$$

b



$$\begin{aligned}\text{Area} &= 5 \times 5 \\ &= 25 \text{ square m}\end{aligned}$$

c



$$\begin{aligned}\text{Area} &= 9 \times 4 \\ &= 36 \text{ square cm}\end{aligned}$$

d



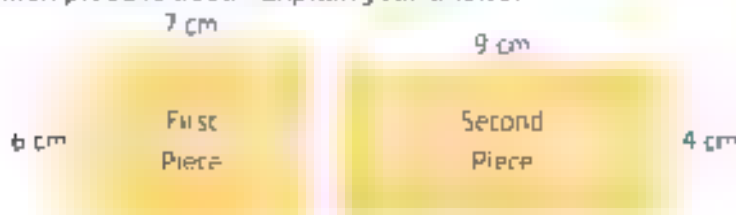
$$\begin{aligned}\text{Area} &= 7 \times 7 \\ &= 49 \text{ square cm}\end{aligned}$$

e



$$\begin{aligned}\text{Area} &= 8 \times 3 \\ &= 24 \text{ square m}\end{aligned}$$

- 5 Ahmed has two pieces of paper as shown. He wants to use one of them to draw a rectangle whose area is 40 square centimeters. Which piece is used? Explain your answer.

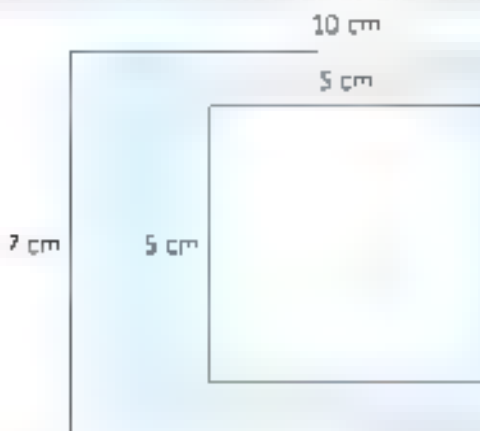


$$\text{Area of the first piece} = 7 \times 6 = 42 \text{ square cm}$$

$$\text{Area of the second piece} = 9 \times 4 = 36 \text{ square cm}$$

The appropriate piece is **first**.

- 6 Hussam has a piece of paper in the shape of a rectangle, 10 cm long and 7 cm wide. From it he cut a square piece with a side length of 5 cm. What is the area of the remainder?



$$\text{Area of the rectangle} = 10 \times 7 = 70 \text{ square cm}$$

$$\text{Area of the square} = 5 \times 5 = 25 \text{ square cm}$$

$$\text{Area of the remaining part} = 70 - 25 = 45 \text{ square cm}$$



## Choose the correct answer:

- a Two hundred twenty thousand and two in **standard form** =  
 $220\,000$  ☒  $2 \times 0\,200$  ☐  $220\,002$
- b  $5 + 5 + 5 + 5 + 5 =$   
 $5 + 5$  ☐  $5 \times 5$  ☒  $5 + 6$
- c 70 Thousands + 70 Tens =  
 $70\,700$  ☒  $70\,070$  ☐  $7\,070$
- d  $\quad \times \quad = (3 \times 5 + 3 \times 2)$   
 $3 \times 3$  ☒  $5 \times 2$  ☐  $3 \times 7$
- e The **smallest** 5-digit number is  
 $10\,000$  ☒  $99\,999$  ☐  $10\,234$

## Complete the following

- a  $9 \times 3 = 3 \times 9$
- b The number that comes just before 35,000 is **34 999**
- c  $23\,230 - 230 +$  **23,000**
- d All sides are **equal in length** in **square** and rhombus
- e The time shown on the opposite clock is **5 past 12**

## Answer the following:

- a Find the area and perimeter of each of the following



Area =  $3 \times 5 = 15$  square units    Area =  $2 \times 6 = 12$  square units  
 Perimeter =  $2 \times (3 + 5) = 16$  length units    Perimeter =  $2 \times (2 + 6) = 16$  length units

- b Arrange the following numbers in a descending order:

25 250    25 025    25 205    25 502    25 052  
 25 502    25 250    25 205    25 052    25 025

# 5&6 Different Perimeters for the Same Area - Different Areas for the Same Perimeter

5&6

- 1 Draw a rectangle with the same area as the given rectangle but with different perimeter

A

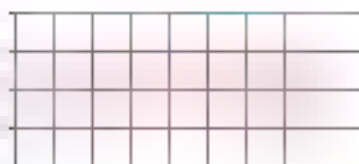


Area = 12 square units  
Perimeter = 14 length units

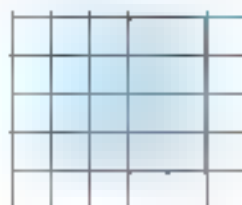


Area = 12 square units  
Perimeter = 16 length units

B

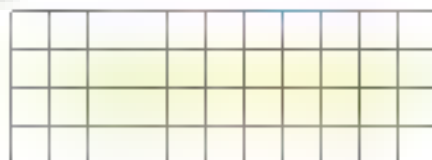


Area = 16 square units  
Perimeter = 20 length units



Area = 16 square units  
Perimeter = 16 length units

C

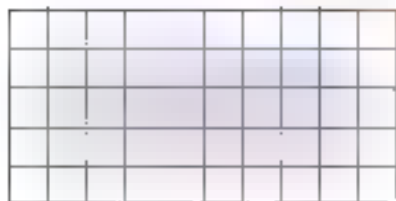


Area = 20 square units  
Perimeter = 24 length units

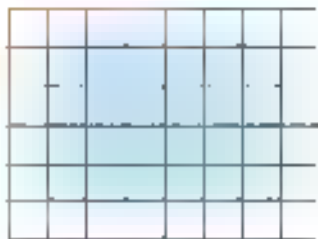


Area = 20 square units  
Perimeter = 18 length units

①



Area = **24** square units  
 Perimeter = **22** length units



Area = **24** square units  
 Perimeter = **20** length units

②

Area = **20** square units  
 Perimeter = **18** length units



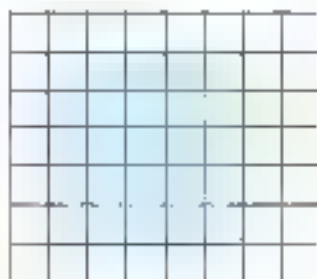
Area = **20** square units  
 Perimeter = **24** length units

## 2 Draw a rectangle with the same perimeter as the given rectangle but with different area

Ⓐ



Area = **24** square units  
Perimeter = **20** length units

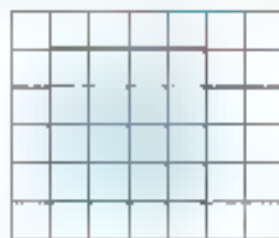


Area = **25** square units  
Perimeter = **20** length units

Ⓑ

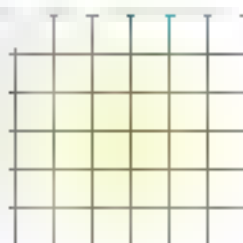


Area = **15** square units  
Perimeter = **16** length units



Area = **16** square units  
Perimeter = **16** length units

Ⓒ

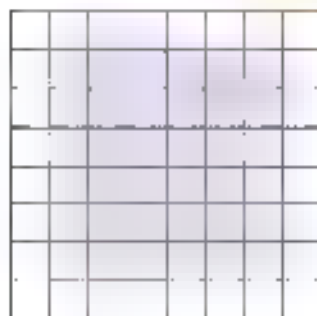


Area = **20** square units  
Perimeter = **18** length units

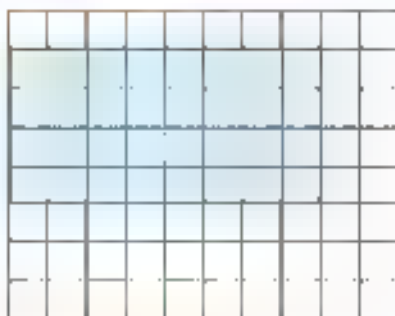


Area = **18** square units  
Perimeter = **18** length units

6

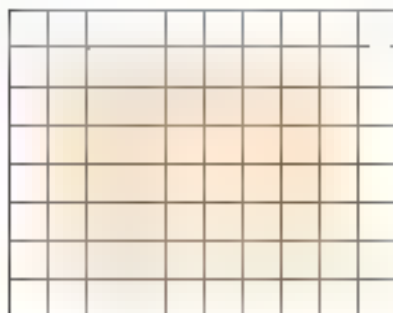


Area = **36** square units  
Perimeter = **24** length units

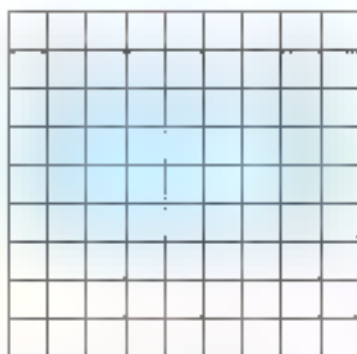


Area = **32** square units  
Perimeter = **24** length units

7



Area = **48** square units  
Perimeter = **28** length units



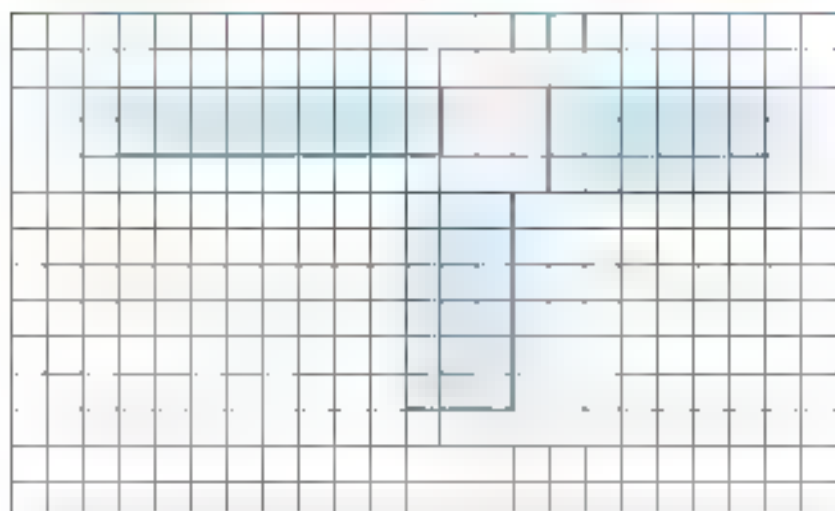
Area = **45** square units  
Perimeter = **28** length units

- 3 Draw 3 different rectangles with an area of 8 square units each.

$$18 = 2 \times 9$$

$$18 = 3 \times 6$$

$$18 = 6 \times 3$$

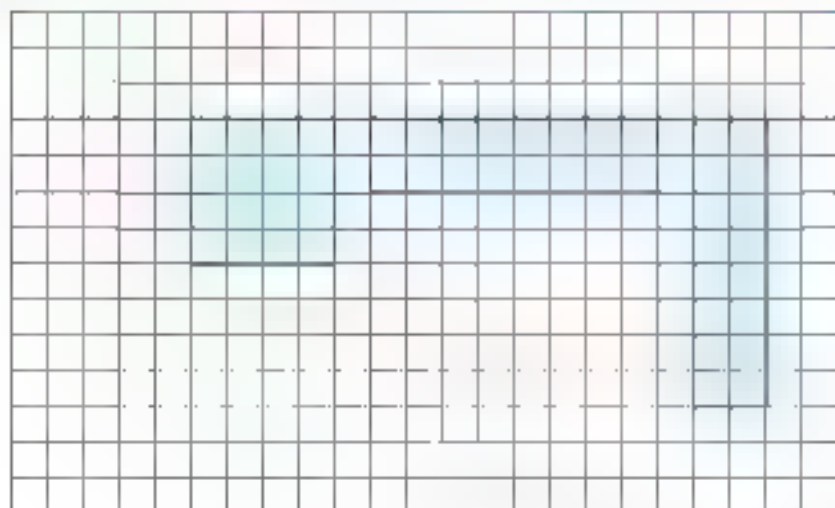


- 4 Draw 3 different rectangles with an area of 16 square units each.

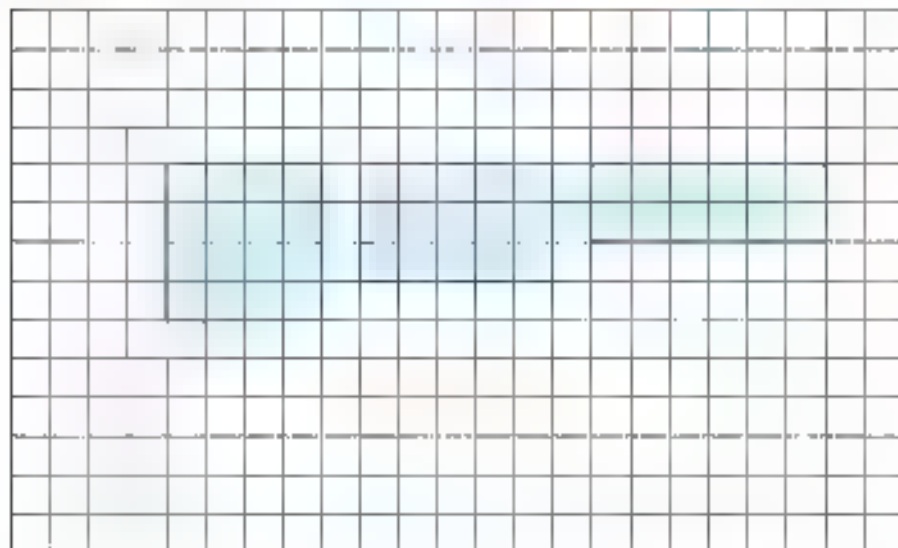
$$16 = 4 \times 4$$

$$16 = 2 \times 8$$

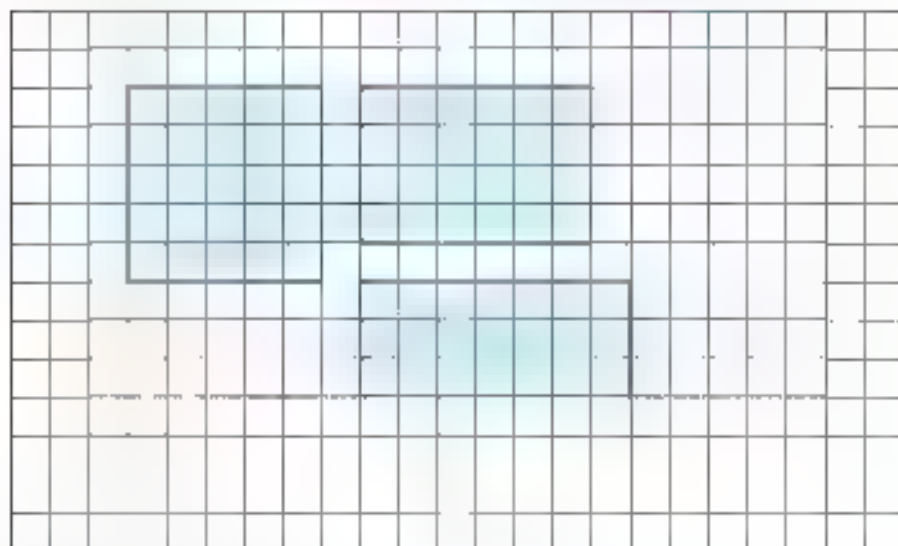
$$16 = 8 \times 2$$



**5** Draw 3 different rectangles with a perimeter of **16** length units each.



**6** Draw 3 different rectangles with a perimeter of **20** length units each.



### First: Choose the correct answer

- a. The **value** of the digit 8 in 35 896 is **8 000** ☒ 600 ☐ 80
- b. The **pentagon** has 5 sides **triangle** ☐ pentagon ☒ hexagon
- c.  $420 + 42 =$  **462** ☐ 42,042 ☒ 462
- d.  $3 \times 5 =$  **15** ☐ 3 ☒ 3 + 3 + 3 ☐ 5 ☐ 5 ☒ 3 ☐ 5
- e.  $8 \times 4 =$  **32** ☐ 4 ☒ 8 ☐ 8 + 4 ☐ 8 + 8 ☐ 8

### Second: Complete the following

- a.  $7 \times 8 = (7 \times 4) + (7 \times 4)$
- b. 70,020 (in word form) = **Seventy thousand twenty**  
 x0 xxx0 xxx00 xxx000 xxx0000 xxx00000
- c. The **greatest** number formed from the digits 5, 3, 0, 4, and 2 is **54 320**
- d.  $45 \div 9 = 5$

### Third: Complete the following

- a. Draw 2 different rectangles with an area of 12 square units.



- b. Draw 2 different rectangles with a perimeter of 12 length units.





## 7 Applications on Perimeter and Area

- 1 A farmer is building a fence around his garden. If the garden is 8 meters long and 3 meters wide, how much fencing does he need to buy?

$$8 + 3 + 8 + 3 = 22 \text{ meters}$$



- 2 Each side of a square patch of grass is 5 meters long. What is the patch's area?

$$5 \times 5 = 25 \text{ square meters}$$



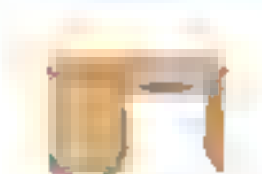
- 3 The surface of a rectangular table is 4 m long and 3 m wide. What is its area?

$$4 \times 3 = 12 \text{ square meters}$$



- 4 The surface of an office desk is 3 m wide and 3 m long. What is its perimeter?

$$3 + 2 + 3 + 2 = 10 \text{ m}$$



- 5 A rectangular goat farm is 10 meters long and 7 meters wide. What is its area?

$$10 \times 7 = 70 \text{ square meters}$$



- 6 Each side of a square piece of paper is 9 cm long. What is the piece of paper's area?

$$9 \times 9 = 81 \text{ square cm}$$



- 7 Mariam wants to tile the kitchen floor. The floor is 4 meters long and 2 meters wide. What is the area of the kitchen?

$$4 \times 2 = 8 \text{ square meters}$$



- 8 A book has a length of 20 cm and a width of 15 cm. What is the perimeter of the book?

$$20 + 15 + 20 + 15 = 70 \text{ cm}$$



- 9 Before soccer practice, Adam warms up by jogging around the entire soccer field. The field measures 80 meters by 120 meters. How many meters did Adam jog in all?

$$80 + 120 + 80 + 120 = 400 \text{ m}$$



- 10 Rana has some brownies. The length of each brownie is 7 cm and the width is 5 cm. Find the area of the brownies.

$$7 \times 5 = 35 \text{ square cm}$$



**Multiple Choice** Choose the correct answer.

- a 9 Ones + 3 Tens + 7 Hundreds + 15 Thousands =  
(93,715 ☐ 15,739 ☒ 150,739)
- b The **greatest** 5 different-digit number is  
90,000 ☐ 98,765 ☒ 10,234
- c  $3 + 3 + 3 + 3 + 3 + 3 =$   
(3 x 5 ☐ 6 + 3 ☐ 6 x 3)
- d  $4 \times 3 = 4 \times 3 =$   
 $4 \times 9$  ☐  $16 \times 3$  ☐  $4 \times 6$
- e The number 1 has **factor(s)**  
(1 ☒ 2 ☐ 3)

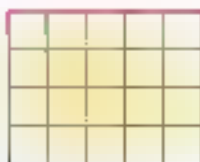
**Short Answer** Complete the following.

- a The number 52,374 (in word form) **Fifty two thousand, three hundred seventy four**
- b The **hexagon** has **6** vertices
- c The number that comes just **after** 20,099 is **20,100**
- d The **value** of the digit 0 in 305,124 is **0**

**Problem Solving** Complete the following.

- a Find the **area** and **perimeter** of the following figures.

①



Area = **20** square units  
Perimeter = **18** length units

②



Area = **28** square units  
Perimeter = **22** length units

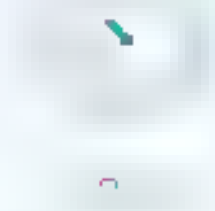
- b. Write the time shown on the clock in words and in digits.

1



10 past 4

2



20 to 11

- c. The following data shows the weights of 24 students in kilograms.

Weight	50	51	52	53	54	55	56	57	58
Number of Students	3	4	5	0	2	1	5	0	4

Create a line plot using this data.

Weights of Students



# PUZZLE

1 Select the correct answer from a choice of six possibilities

Ⓐ am not a rectangle

My area is more than 8 squares

My perimeter is more than 2

Who am I?

Ⓑ have fewer than 7 sides

My area is less than 7 squares

My perimeter is less than 2

Who am I?



2 Fill in the missing numbers and signs (+, -, x, ÷)

Ⓐ



Ⓑ



## Answers

- Ⓐ → (a) Ⓑ → (b)  
 Ⓐ 42 ÷ 12 = 3 42 ÷ 6 = 7 42 ÷ 3 = 14 42 ÷ 9 = 4  
 Ⓑ 36 ÷ 9 = 4 36 ÷ 18 = 2 36 ÷ 4 = 9 36 ÷ 6 = 6



1

• (Lesson 8 Chapter 5 "Multiplying by Multiples of 10")

### 1 Find the product.

Ⓐ  $1 \times 40 = 40$

Ⓐ  $8 \times 30 = 240$

Ⓐ  $3 \times 60 = 180$

Ⓑ  $3 \times 50 = 150$

Ⓑ  $5 \times 80 = 400$

Ⓑ  $5 \times 70 = 350$

Ⓒ  $7 \times 90 = 630$

Ⓒ  $7 \times 40 = 280$

Ⓒ  $9 \times 80 = 720$

Ⓓ  $7 \times 70 = 490$

Ⓓ  $8 \times 60 = 480$

Ⓓ  $9 \times 20 = 180$

Ⓔ  $2 \times 50 = 100$

Ⓔ  $2 \times 40 = 80$

Ⓔ  $4 \times 70 = 280$

Ⓕ  $4 \times 60 = 240$

Ⓕ  $6 \times 20 = 120$

Ⓕ  $6 \times 80 = 480$

### 2 Complete the following:

Ⓐ  $30 + 30 + 30 + 30 = 4 \times 30 = 120$

Ⓑ  $20 + 20 + 20 = 3 \times 20 = 60$

Ⓒ  $50 + 50 + 50 + 50 + 50 = 5 \times 50 = 250$

Ⓓ  $40 + 40 + 40 + 40 + 40 + 40 + 40 = 7 \times 40 = 280$

Ⓔ  $70 + 70 = 2 \times 70 = 140$

Ⓕ  $5 \times 20 = 20 + 20 + 20 + 20 + 20 = 100$

Ⓖ  $4 \times 30 = 30 + 30 + 30 + 30 = 120$

Ⓗ  $3 \times 60 = 60 + 60 + 60 = 180$

Ⓙ  $2 \times 90 = 90 + 90 = 180$

Ⓚ  $3 \times 80 = 80 + 80 + 80 = 240$



### 3 Complete the following

Ⓐ  $6 \times 10 = 60$

Ⓑ  $52 \times 10 = 520$

Ⓒ  $16 \times 10 = 160$

Ⓓ  $7 \times 10 = 70$

Ⓔ  $4 \times 10 = 40$

Ⓕ  $86 \times 10 = 860$

Ⓖ  $55 \times 10 = 550$

Ⓐ  $8 \times 10 = 80$

Ⓑ  $22 \times 10 = 220$

Ⓒ  $82 \times 10 = 820$

Ⓓ  $4 \times 10 = 40$

Ⓔ  $10 \times 10 = 100$

Ⓕ  $27 \times 10 = 270$

Ⓖ  $74 \times 10 = 740$

### 4 Complete the following

Ⓐ  $8 \times 50 = 8 \times 5 \times 10 = 40 \times 10 = 400$

Ⓑ  $5 \times 40 = 5 \times 4 \times 10 = 20 \times 10 = 200$

Ⓒ  $9 \times 80 = 9 \times 8 \times 10 = 72 \times 10 = 720$

Ⓓ  $5 \times 90 = 5 \times 9 \times 10 = 45 \times 10 = 450$

Ⓔ  $8 \times 80 = 8 \times 8 \times 10 = 64 \times 10 = 640$

Ⓕ  $6 \times 30 = 6 \times 3 \times 10 = 18 \times 10 = 180$

Ⓖ  $5 \times 70 = 5 \times 7 \times 10 = 35 \times 10 = 350$

Ⓓ  $6 \times 90 = 6 \times 9 \times 10 = 54 \times 10 = 540$

Ⓔ  $7 \times 70 = 7 \times 7 \times 10 = 49 \times 10 = 490$

### 5 Choose the correct answer

Ⓐ  $5 \times 6 \times 10 = \quad \times 10$

300 Ⓐ 20 Ⓑ 30

Ⓑ  $7 \times 4 \times 10 = \quad \times 10$

280 Ⓐ 4 Ⓑ 28

# Patterns of Multiplying by Multiples of 10

Ⓐ  $28 \times 10 = 280$

Ⓑ  $36 \times 10 = 360$

Ⓒ  $28 \times 10 = 280$

Ⓓ  $36 \times 10 = 360$

Ⓔ  $28 \times 10 = 280$

Ⓕ  $36 \times 10 = 360$

Ⓖ  $28 \times 10 = 280$

Ⓗ  $36 \times 10 = 360$

Ⓙ  $28 \times 10 = 280$

Ⓚ  $36 \times 10 = 360$

Ⓐ  $28 \times 10 = 280$

Ⓑ  $36 \times 10 = 360$

Ⓒ  $28 \times 10 = 280$

Ⓓ  $36 \times 10 = 360$

Ⓔ  $28 \times 10 = 280$

Ⓕ  $36 \times 10 = 360$

Ⓖ  $28 \times 10 = 280$

Ⓗ  $36 \times 10 = 360$

Ⓙ  $28 \times 10 = 280$

Ⓚ  $36 \times 10 = 360$

## Match:

Ⓐ  $2 \times 60 = 120$

Ⓑ  $8 \times 50 = 400$

Ⓒ  $3 \times 60 = 180$

Ⓓ  $6 \times 60 = 360$

Ⓔ  $4 \times 40 = 160$

Ⓕ  $4 \times 50 = 200$

Ⓖ  $1 \times 80 = 80$

Ⓐ  $40 \times 10 = 400$

Ⓑ  $20 \times 9 = 180$

Ⓒ  $3 \times 40 = 120$

Ⓓ  $2 \times 80 = 160$

Ⓔ  $4 \times 60 = 240$

Ⓕ  $40 \times 9 = 360$

Ⓖ  $2 \times 100 = 200$



## 7 Find the product.

Ⓐ  $9 \times 30 = 270$

Ⓑ  $9 \times 300 = 2,700$

Ⓒ  $90 \times 30 = 2,700$

Ⓓ  $90 \times 300 = 27,000$

Ⓔ  $900 \times 300 = 270,000$

Ⓐ  $8 \times 20 = 160$

Ⓑ  $80 \times 20 = 1,600$

Ⓒ  $800 \times 20 = 16,000$

Ⓓ  $8,000 \times 20 = 160,000$

Ⓐ  $6 \times 4 = 24$

Ⓑ  $6 \times 400 = 2,400$

Ⓒ  $600 \times 40 = 24,000$

Ⓓ  $600 \times 400 = 240,000$

Ⓔ  $60 \times 200 = 12,000$

Ⓐ  $5 \times 2 = 10$

Ⓑ  $50 \times 20 = 1,000$

Ⓒ  $500 \times 200 = 100,000$

Ⓓ  $50 \times 2,000 = 100,000$

## 8 Complete the following

Ⓐ  $20 \times 5 = 100$

Ⓑ  $50 \times 300 = 15,000$

Ⓒ  $8,000 \times 2 = 16,000$

Ⓓ  $100 \times 200 = 20,000$

Ⓔ  $500 \times 20 = 10,000$

Ⓐ  $300 \times 50 = 15,000$

Ⓑ  $70 \times 20 = 1,400$

Ⓒ  $50 \times 4 = 200$

Ⓓ  $40 \times 200 = 8,000$

Ⓐ  $70 \times 300 = 21,000$

Ⓑ  $50 \times 20 = 1,000$

Ⓒ  $300 \times 60 = 18,000$

Ⓓ  $10 \times 400 = 4,000$

Ⓔ  $3 \times 900 = 2,700$

Ⓐ  $20 \times 500 = 10,000$

Ⓑ  $4 \times 60 = 240$

Ⓒ  $500 \times 1,000 = 500,000$

Ⓓ  $40 \times 800 = 32,000$

## First: Choose the correct answer

- a The **value** of the digit 9 in 89,123 is  $90,000$  ☒  $9,000$  ☐  $900$
- b  $25,025 \div 25 =$   $25$  ☐  $250$  ☒  $25,000$
- c  $4 + 4 + 4 + 4 =$   $4 + 4$  ☐  $8 + 2$  ☒  $8 \times 2$
- d  $6 \times 6 =$   $6 + 6 + 6 + 6$  ☐  $6 \times 2$  ☒  $9 \times 4$
- e The **smallest** number formed from 6, 7, 2, 0 and 5 is  
( $\overline{20,567}$ ) ☒  $76,520$  ☐  $25,670$

## Second: Complete the following:

- a 750 Thousands + 100 Hundreds =  $750\ 000 + 10\ 000 = 760\ 000$
- b  $7 \times 14 = 7 \times 10 + 7 \times 4 = 70 + 28 = 98$   
 $6 \times 71 = 6 \times 70 + 6 \times 1 = 420 + 6 = 426$
- a Twenty thousand and twenty (in standard form)  $20,020$
- b  $80,72$   $64,56$  ,  $48$  ,  $40$  ,  $32$

## Third: Complete the following:

a Find the product:

☒  $7 \times 50 = 350$

☐  $45 \div 5 = 9$

☒  $8 \times 90 = 720$

☐  $48 \div 8 = 6$

b Arrange the following numbers in a descending order

$10,005$  ,  $1,005$  ,  $1,050$  ,  $15,000$  ,  $1,500$   
 •  $15,000$      $10\ 005$      $1\ 500$      $1,050$      $1\ 005$

c Ahmed went to the store 9 times last month

He buys 6 eggs each time he goes there

How many eggs did Ahmed buy last month?

$9 \times 6 = 54$  eggs

# Lesson 2

## 1 Complete.

① Find the product

$$1 \quad 2 \times 2 = 4$$

$$4 \quad 3 \times 3 = 9$$

$$7 \quad 2 \times 6 = 12$$

$$10 \quad 4 \times 4 = 16$$

$$1 \quad 2 \times 9 = 18$$

$$10 \quad 4 \times 6 = 24$$

$$10 \quad 3 \times 9 = 27$$

$$1 \quad 4 \times 8 = 32$$

$$14 \quad 6 \times 5 = 36$$

$$25 \quad 3 \times 9 = 45$$

$$11 \quad 6 \times 9 = 54$$

$$30 \quad 2 \times 9 = 63$$

$$2 \quad 2 \times 3 = 6$$

$$4 \quad 2 \times 5 = 10$$

$$6 \quad 2 \times 7 = 14$$

$$2 \times 8 = 16$$

$$14 \quad 4 \times 5 = 20$$

$$3 \times 8 = 24$$

$$4 \times 7 = 28$$

$$25 \quad 5 \times 7 = 35$$

$$20 \quad 5 \times 8 = 40$$

$$9 \quad 6 \times 8 = 48$$

$$11 \quad 7 \times 8 = 56$$

$$25 \quad 8 \times 9 = 72$$

$$3 \quad 2 \times 4 = 8$$

$$6 \quad 3 \times 4 = 12$$

$$9 \quad 3 \times 5 = 15$$

$$12 \quad 3 \times 6 = 18$$

$$15 \quad 3 \times 7 = 21$$

$$10 \quad 5 \times 5 = 25$$

$$11 \quad 5 \times 6 = 30$$

$$25 \quad 4 \times 9 = 36$$

$$27 \quad 6 \times 7 = 42$$

$$30 \quad 7 \times 7 = 49$$

$$33 \quad 8 \times 8 = 64$$

$$36 \quad 9 \times 9 = 81$$

② Find the product

$$2 \times 2 = 4$$

$$4 \quad 3 \times 2 = 6$$

$$7 \quad 4 \times 2 = 8$$

$$10 \quad 3 \times 3 = 9$$

$$3 \quad 5 \times 2 = 10$$

$$2 \quad 6 \times 2 = 18$$

$$5 \quad 5 \times 4 = 20$$

$$11 \quad 7 \times 3 = 21$$

$$8 \times 3 = 24$$

$$14 \quad 6 \times 4 = 24$$

$$3 \quad 9 \times 4 = 36$$

$$6 \quad 8 \times 5 = 40$$

$$9 \quad 7 \times 6 = 42$$

$$12 \quad 9 \times 5 = 45$$

$$15 \quad 8 \times 6 = 48$$

# Strategies of Multiplying by 9

$$16 \ 6 \times 2 = 12$$

$$5 \times 5 = 25$$

$$18 \ 7 \times 7 = 49$$

$$17 \ 4 \times 3 = 12$$

$$20 \ 9 \times 3 = 27$$

$$21 \ 9 \times 6 = 54$$

$$20 \ 7 \times 2 = 14$$

$$23 \ 7 \times 4 = 28$$

$$4 \ 8 \times 7 = 56$$

$$25 \ 5 \times 3 = 15$$

$$26 \ 6 \times 5 = 30$$

$$27 \ 9 \times 7 = 63$$

$$20 \ 4 \times 4 = 16$$

$$29 \ 8 \times 4 = 32$$

$$20 \ 8 \times 8 = 64$$

$$30 \ 8 \times 2 = 16$$

$$32 \ 7 \times 5 = 35$$

$$33 \ 9 \times 8 = 72$$

$$34 \ 9 \times 2 = 18$$

$$35 \ 6 \times 6 = 36$$

$$35 \ 9 \times 9 = 81$$

## 2 Complete:

$$\begin{array}{r} 16 \\ \times 2 \\ \hline 4 \end{array}$$

$$\begin{array}{r} 20 \\ \times 6 \\ \hline 12 \end{array}$$

$$\begin{array}{r} 27 \\ \times 9 \\ \hline 18 \end{array}$$

$$\begin{array}{r} 21 \\ \times 9 \\ \hline 27 \end{array}$$

$$\begin{array}{r} 25 \\ \times 6 \\ \hline 36 \end{array}$$

$$\begin{array}{r} 26 \\ \times 6 \\ \hline 54 \end{array}$$

$$\begin{array}{r} 27 \\ \times 3 \\ \hline 6 \end{array}$$

$$\begin{array}{r} 20 \\ \times 7 \\ \hline 14 \end{array}$$

$$\begin{array}{r} 20 \\ \times 5 \\ \hline 20 \end{array}$$

$$\begin{array}{r} 23 \\ \times 7 \\ \hline 28 \end{array}$$

$$\begin{array}{r} 20 \\ \times 8 \\ \hline 40 \end{array}$$

$$\begin{array}{r} 27 \\ \times 8 \\ \hline 56 \end{array}$$

$$\begin{array}{r} 25 \\ \times 4 \\ \hline 8 \end{array}$$

$$\begin{array}{r} 26 \\ \times 5 \\ \hline 15 \end{array}$$

$$\begin{array}{r} 27 \\ \times 7 \\ \hline 21 \end{array}$$

$$\begin{array}{r} 20 \\ \times 6 \\ \hline 30 \end{array}$$

$$\begin{array}{r} 20 \\ \times 6 \\ \hline 42 \end{array}$$

$$\begin{array}{r} 23 \\ \times 7 \\ \hline 63 \end{array}$$

$$\begin{array}{r} 27 \\ \times 3 \\ \hline 9 \end{array}$$

$$\begin{array}{r} 20 \\ \times 4 \\ \hline 16 \end{array}$$

# Chapter 6

$$\begin{array}{r} 4 \\ \times 6 \\ \hline 24 \end{array}$$

$$\begin{array}{r} 4 \\ \times 8 \\ \hline 32 \end{array}$$

$$\begin{array}{r} 5 \\ \times 9 \\ \hline 45 \end{array}$$

$$\begin{array}{r} 8 \\ \times 8 \\ \hline 64 \end{array}$$

$$\begin{array}{r} 2 \\ \times 5 \\ \hline 10 \end{array}$$

$$\begin{array}{r} 2 \\ \times 8 \\ \hline 16 \end{array}$$

$$\begin{array}{r} 6 \\ \times 8 \\ \hline 48 \end{array}$$

$$\begin{array}{r} 5 \\ \times 7 \\ \hline 35 \end{array}$$

$$\begin{array}{r} 6 \\ \times 7 \\ \hline 42 \end{array}$$

$$\begin{array}{r} 9 \\ \times 8 \\ \hline 72 \end{array}$$

$$\begin{array}{r} 3 \\ \times 4 \\ \hline 12 \end{array}$$

$$\begin{array}{r} 3 \\ \times 6 \\ \hline 18 \end{array}$$

$$\begin{array}{r} 5 \\ \times 5 \\ \hline 25 \end{array}$$

$$\begin{array}{r} 9 \\ \times 4 \\ \hline 36 \end{array}$$

$$\begin{array}{r} 7 \\ \times 7 \\ \hline 49 \end{array}$$

$$\begin{array}{r} 9 \\ \times 9 \\ \hline 81 \end{array}$$

$$\begin{array}{r} 9 \\ \times 9 \\ \hline 81 \end{array}$$

$$\begin{array}{r} 6 \\ \times 8 \\ \hline 48 \end{array}$$

$$\begin{array}{r} 8 \\ \times 7 \\ \hline 56 \end{array}$$

$$\begin{array}{r} 7 \\ \times 5 \\ \hline 35 \end{array}$$

$$\begin{array}{r} 6 \\ \times 6 \\ \hline 36 \end{array}$$

$$\begin{array}{r} 4 \\ \times 4 \\ \hline 16 \end{array}$$

$$\begin{array}{r} 8 \\ \times 8 \\ \hline 64 \end{array}$$

$$\begin{array}{r} 7 \\ \times 7 \\ \hline 49 \end{array}$$

$$\begin{array}{r} 9 \\ \times 6 \\ \hline 54 \end{array}$$

$$\begin{array}{r} 8 \\ \times 4 \\ \hline 32 \end{array}$$

$$\begin{array}{r} 8 \\ \times 6 \\ \hline 48 \end{array}$$

$$\begin{array}{r} 5 \\ \times 5 \\ \hline 25 \end{array}$$

## 3 Use the Finger Trick Strategy to find.

a



$$4 \times 9$$
  

$$36$$

b



$$2 \times 9$$
  

$$18$$

c



$$9 \times 6$$
  

$$54$$

d



$$3 \times 7$$
  

$$21$$

e



$$8 \times 9$$
  

$$72$$

f



$$2 \times 5$$
  

$$10$$

g



$$9 \times 9$$
  

$$81$$

h



$$7 \times 9$$
  

$$63$$

i



$$9 \times 1$$
  

$$9$$

j



$$10 \times 9$$
  

$$90$$



**4 Use the Ten-Fat-Is Strategy to find.**

**Ⓐ  $9 \times 2$**

2	2	2	2	2	2	2	2	2	2
---	---	---	---	---	---	---	---	---	---

$9 \times 2 = 10 \times 2 - 2 = 20 - 2 = 18$

**Ⓑ  $9 \times 4$**

4	4	4	4	4	4	4	4	4	4
---	---	---	---	---	---	---	---	---	---

$9 \times 4 = 10 \times 4 - 4 = 40 - 4 = 36$

**Ⓒ  $9 \times 6$**

6	6	6	6	6	6	6	6	6	6
---	---	---	---	---	---	---	---	---	---

$9 \times 6 = 10 \times 6 - 6 = 60 - 6 = 54$

**Ⓓ  $9 \times 8$**

8	8	8	8	8	8	8	8	8	8
---	---	---	---	---	---	---	---	---	---

$9 \times 8 = 10 \times 8 - 8 = 80 - 8 = 72$

①  $9 \times 1$ 

1	1	1	1	1	1	1	1	1	1
---	---	---	---	---	---	---	---	---	---

$$9 \times 1 = 10 \times 1 - 1 = 10 - 1 = 9$$

②  $9 \times 3$ 

3	3	3	3	3	3	3	3	3	3
---	---	---	---	---	---	---	---	---	---

$$9 \times 3 = 10 \times 3 - 3 = 30 - 3 = 27$$

③  $9 \times 5$ 

5	5	5	5	5	5	5	5	5	5
---	---	---	---	---	---	---	---	---	---

$$9 \times 5 = 10 \times 5 - 5 = 50 - 5 = 45$$

④  $9 \times 7$ 

7	7	7	7	7	7	7	7	7	7
---	---	---	---	---	---	---	---	---	---

$$9 \times 7 = 10 \times 7 - 7 = 70 - 7 = 63$$

⑤  $9 \times 9$ 

9	9	9	9	9	9	9	9	9	9
---	---	---	---	---	---	---	---	---	---

$$9 \times 9 = 10 \times 9 - 9 = 90 - 9 = 81$$





## 5 Choose the correct answer

☐  $5 + 5 + 5 + 5 + 5 + 5 =$

$5 \times 5$  ☒  $3 \times 10$  ☐  $6 \times 6$

☐  $8 \times 3 =$

$6 \times 4$  ☐  $3 + 3 + 3$  ☐  $4 \times 4$

☐  $10 + 10 + 10 + 10$

$5 \times 4$  ☐  $10 \times 10$  ☐  $5 \times 8$

☐  $9 + 9 + 9 + 9 =$

$(9 \times 9)$  ☐  $3 \times 6$  ☐  $6 \times 6$

☐  $6 + 6 + 6 + 6 =$

$6 \times 4$  ☐  $6 + 4$  ☐  $6 + 6$

☐  $9 \times 7 = 10 \times$  7

$10$  ☐  $9$  ☐  $7$

☐  $6 \times 3 =$

$3 + 3 + 3$  ☐  $6 + 6 + 6 + 6$  ☐  $9 + 9$

☐  $4 + 4 + 4 + 4 =$

$(8 \times 4)$  ☐  $4 + 4$  ☐  $4 \times 4$

## 6 Complete:

☐  $8 \times 3 = 8 + 8 + 8 = 24$

☐  $6 \times 6 = 6 + 6 + 6 + 6 + 6 + 6 = 36$

☐  $5 \times 4 = 10 + 10 = 20$

☐  $6 \times 3 = 2 \times 9 = 18$

☐  $3 \times 4 = 2 \times 6 = 12$

☐  $4 \times 4 = 2 \times 8 = 16$

☐  $3 \times 8 = 4 \times 6 = 24$

☐  $8 + 8 + 8 + 8 = 4 \times 8 = 32$

☐  $6 + 6 + 6 + 6 + 6 = 5 \times 6 = 30$

☐  $9 \times 8 = 10 \times 8$  8 = 72

☐  $9 \times 6 = (10 \times 6) - 6 = 54$

# Accumulative Assessment

## 25 up to Lesson 2

**First:** Choose the correct answer

- a  $9 \times 7 = 10 \times 7 + 7$  ( ~~6~~ ~~(7)~~ ~~8~~ )  
 b  $8 + 8 + 8 + 8 + 8 =$   $8 \times 8 + 8 + 5 + 4 \times 10$   
 c  $450 + 45 =$   $45,045$  ~~495~~ ~~4,545~~ )  
 d  $750,000 + 15,000 + 40 =$   $751,540$  ~~765,040~~ ~~750,190~~  
 e 200 Thousands = Tens  $200,000$  ~~20,000~~ ~~2,000~~

**Second:** Complete the following:

- a The number that comes just **before** 20,000 is **19 999**  
 b The **value** of the digit 0 in 23,054 is **0**  
 c  $(10 \times 6) \div 6 =$  **9**  $\times 6$   
 d  $8 + 8 + 8 + 8 + 8 + 8 =$  **6**  $\times$  **8**  
 e Five hundred thousand and nine (in standard form) **800 009**

**Third:** Answer the following

a Find out the result of the following:

①	$\begin{array}{r} 45 \\ + 67 \\ \hline 112 \end{array}$	②	$\begin{array}{r} 98 \\ 27 \\ \hline 71 \end{array}$	③	$\begin{array}{r} 97 \\ 79 \\ \hline 18 \end{array}$
---	---	---	--	---	--

b Complete using (<, = or >):

①  $5 + 5 + 5 + 5 < 5 \times 5$       ②  $4 + 4 + 4 = 2 \times 6$   
 ③  $8 \times 5 > 5 + 5$       ④  $9 \times 3 = 3 \times 9$

Each pen costs 9LE

How much do 8 pens cost?

**9**  $\times$  **8** = **72 LE**





## Lesson 3

1 Find the result of the following:

Ⓐ  $7 + 0 = 7$

Ⓑ  $0 + 9 = 9$

Ⓒ  $6 \times 0 = 0$

Ⓓ  $0 \times 4 = 0$

Ⓔ  $9 + 1 = 10$

Ⓕ  $1 + 8 = 9$

Ⓖ  $7 \times 1 = 7$

Ⓗ  $1 \times 5 = 5$

Ⓘ  $5 \times 8 = 40$

Ⓙ  $8 \times 5 = 40$

Ⓚ  $6 + 2 = 8$

Ⓛ  $2 + 6 = 8$

Ⓜ  $5 + 5 = 10$

Ⓝ  $9 + 9 = 18$

Ⓞ  $2 \times 8 = 16$

Ⓟ  $3 \times 2 = 6$

Ⓐ  $5 \times 12 = 5 \times (10 + 2) = (5 \times 10) + (5 \times 2) = 50 + 10 = 60$

(Using Distribution Property)

Ⓒ  $8 \times 13 = 8 \times (10 + 3) = (8 \times 10) + (8 \times 3) = 80 + 24 = 104$

(Using Distribution Property)

Ⓔ  $7 \times 4 + 7 \times 6 = 7 \times (4 + 6) = 7 \times 10 = 70$

(Using Distribution Property)

## 2 Complete the following.

①  $3 + 0 = 3$

②  $0 + 9 = 9$

③  $6 \times 0 = 0$

④  $0 \times 4 = 0$

⑤  $7 \times 1 = 7$

⑥  $1 + 8 = 9$

⑦  $7 \times 1 = 7$

⑧  $1 \times 8 = 8$

⑨  $3 \times 8 = 8 \times 3$

⑩  $6 \times 5 = 5 \times 6$

⑪  $6 + 4 = 4 + 6$

⑫  $4 + 5 = 5 + 4$

⑬  $9 + 9 = 18$

⑭  $7 + 7 = 14$

⑮  $2 \times 8 = 16$

⑯  $3 \times 2 = 6$

⑰  $8 + 8 = 2 \times 8$

⑱  $4 + 4 = 4 \times 2$

⑲  $7 \times 8 = 7 \times 2 + 7 \times 6 = 14 + 42 = 56$

⑳  $9 \times 17 = 9 \times 10 + 9 \times 7 = 90 + 63 = 153$

㉑  $4 \times 14 = 4 \times 10 + 4 \times 4 = 40 + 16 = 56$

㉒  $8 \times 10 = 8 \times 3 + 8 \times 7 = 24 + 56 = 80$

㉓  $3 \times 16 = 3 \times 10 + 3 \times 6 = 30 + 18 = 48$



### 3 Complete using ( $\times$ or $+$ ).

Ⓐ  $5 \times 0 = 0$

Ⓐ  $8 + 0 = 8$

Ⓑ  $0 + 7 = 7$

Ⓑ  $15 \times 0 = 0$

Ⓒ  $6 \times 1 = 6$

Ⓒ  $1 \times 7 = 7$

Ⓓ  $12 + 1 = 13$

Ⓓ  $10 \times 1 = 10$

Ⓔ  $1 \times 3 = 3$

Ⓔ  $6 + 1 = 7$

Ⓕ  $5 \times 3 = 3 \times 5$

Ⓕ  $4 + 9 = 9 + 4$

Ⓖ  $9 + 2 = 2 + 9$

Ⓖ  $8 \times 3 = 3 \times 8$

Ⓖ  $5 \times 6 = (5 \times 3) + (5 \times 3)$

### 4 Choose the correct answer

Ⓐ  $5 \times = 5$

(1) ~~5~~ 0

Ⓑ  $7 \times = 0$

(1) ~~7~~ 0

Ⓒ  $4 + = 4$

(1) ~~4~~ 0

Ⓓ  $6 + = 7$

(1) ~~6~~ 7

Ⓔ  $4 \times = 9 \times 4$

(4) ~~9~~ 1

Ⓕ  $9 + = 3 + 9$

(3) ~~9~~ 12

Ⓖ  $8 \times = 8 + 8$

(8) ~~2~~ 1

Ⓖ  $5 \times = (5 \times 10) + 5 \times 3$

10 ~~3~~ 3



### First: Choose the correct answer

a  $8 \times \quad = 8$

(8 @ 1) @ 0

b  $60,000 + 500 + 2 =$

65,200 @ 60,520 @ 60,502

The **value** of the digit 8 in 85,475 is

8,000 @ 80,000 @ 800,000

d  $8 \times 20 = \quad \times 10$

20 @ 8 @ 16

e  $9 + 9 + 9 + 9 + 9 =$

(9 @ 4) @ 9 @ 9 @ 9

### Second: Complete the following:

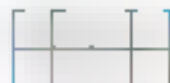
Six hundred six thousand, five hundred fifty (in standard form) **606 550**

b  $15 \text{ Ones} + 3 \text{ Hundreds} + 70 \text{ Thousands} =$  **70 315**

c  $9 \times \quad = 15 \dots = (9 \times 10) + (9 \times 5)$

d The **area** of the opposite figure = **8**

e  



### Third: Answer the following

a Arrange the following numbers in a descending order

**25 250 , 25,025 , 25,205 , 25,502 , 25,052**

• **25,502 , 25 250 , 25 205 , 25 052 , 25,025**

b Find the result

①  $8 \times 0 =$  **0**

②  $90 \times 20 =$  **1 800**

③  $28 \div 7 =$  **4**

④  $1 + \triangle + \triangle + 1 + 1 + \triangle = 6 \times 1 = 6$

c Salma went to the club at **3 15** and left for home at **5 15**

How long did Salma spend in the club?

**2 hours**



## Lesson

# 4

## n Different Forms

### 1 Choose the correct answer

- Ⓐ Seven hundred thousand and seventy =

Ⓐ 700,070 Ⓑ 700,017 Ⓒ 770,000

- Ⓑ  $5 + 20 + 400 + 7,000 =$

Ⓐ 5,247 Ⓑ 70,425 Ⓒ 742,11

- Ⓒ 70,010 comes just **after**

79,999 Ⓑ 70,099 Ⓒ 0,009

- Ⓓ \_\_\_\_\_ comes just **before** 2,000

1,999 Ⓑ 2,001 Ⓒ 1,099

- Ⓔ 20 Thousands + 75 Tens =

2,075 Ⓑ 20,075 Ⓒ 20,750

- Ⓕ 60 Hundreds =

60,000 Ⓑ 6,000 Ⓒ 600,000

- Ⓖ 8,000 Tens = \_\_\_\_\_ Hundreds.

Ⓐ 800 Ⓑ 8,000 Ⓒ 80,000

- Ⓙ 300,000 = \_\_\_\_\_ Hundreds

Ⓐ 30 Ⓑ 300 Ⓒ 3,000

- Ⓚ The **largest** 5-different digit number is

Ⓐ 98,765 Ⓑ 99,999 Ⓒ 10,234

- Ⓛ The **smallest** 6-different digit number is

100,000 Ⓑ 123,456 Ⓒ 102,345

- Ⓜ The **largest** 5-same digit number is

99,999 Ⓑ 98,756 Ⓒ 9,999

- Ⓝ The **smallest** 4-same digit number is

1,000 Ⓑ 1,111 Ⓒ 1,111

- Ⓞ The **value** of the digit 3 in 53,839 is

3,000 Ⓑ 300 Ⓒ 30

- Ⓟ The **value** of the digit 8 in 87,624 is

Ⓐ 800,000 Ⓑ 8,000 Ⓒ 800

- Ⓠ The **place value** of 9 in 9,247 is

Hundreds Ⓑ Thousands Ⓒ Ten Thousands

**2 Complete the following.**

① Two hundred five thousand, six hundred and eleven = **205,611**  
(in standard form)

② 700,608 (in word form) **Seven hundred thousands, six hundred eight**

③  $700,000 + 70,000 + 5,000 + 800 + 50 + 3 =$  **775 853**

④ 998 Thousands + 6 Ones + 4 Tens + 7 Hundreds = **998 756**

⑤  $70 + 0 + 0 + 4 =$  **74**

⑥ 77,856 = **70 000 + 7 000 + 800 + 50 + 6**

⑦ 552 159 = **5 Tens + 552 Thousands + 9 Ones + 1 Hundreds**

⑧ The number that comes just **after** 362 999 is **363,000**

⑨ 70,250 comes just **after** **70,249**

⑩ The number **100,000** comes just **after** 99 999

⑪ The number that comes just **before** 700,000 is **699,999**

⑫ 31 560 comes just **before** **31 561**

⑬ The number **105 199** comes just **before** 105 200

⑭ The **place value** of 5 in 254 269 is **Ten Thousands**

⑮ The **value** of the digit 7 in 79 159 is **70,000**

⑯ The **largest** 6-digit number is **999 999**

⑰ The **smallest** 6-digit number is **100 000**

⑱ The **largest** 5-digit number is **99,999**

⑲ The **smallest** 5-digit number is **10 000**

⑳ The **largest** and the **smallest** numbers formed from the

digits 7 2 0 6 and 3 are **76 320** and **20 367**





### 3 Complete the following table.

Number	The value of the Encircled Digit	The Place value of the Encircled Digit
① 4 55 369	400 000	Hundred Thousands
② 3 7 2 512	60 000	Ten Thousands
③ 28 0 239	0	Thousands
④ 696,2 74	70	Tens
⑤ 51,78 0	0	Ones

### 4 Complete using (< = or >).

① 345 123 < 345 211

② 88 250 < 88 320

③ 441,002 < 441,020

④ 99 999 < 100,010

⑤ 5,628 > 5,268

⑥ 39,020 < 39,200

⑦ 5 Tens + 7 Thousands + 4 Hundreds > 7405

⑧ Twenty thousand and twenty > 2,020

⑨ 500,000 + 50,000 500 5 < 555,005

⑩ 3,600 + 36 < 360,036

⑪ An hour and a quarter < 95 minutes

⑫ 2 hours and 25 minutes < 250 minutes

- 5 Arrange each group of the following numbers in an ascending order and in a descending order

Ⓐ 32,023 98,123 75,023 54,987 20,368

**Ascending Order**

20,368 32,023 54,987 75,023 98,123

**Descending Order**

98,123 75,023 54,987 32,023 20,368

Ⓑ 500,368 500,638 500,663 500,386 500,683

**Ascending Order**

500,368 500,386 500,638 500,663 500,683

**Descending Order**

500,683 500,663 500,638 500,386 500,368

- 6 A number that has 5 Thousands, 7 Hundreds, 6 Tens, and 4 Ones.  
What number is it?

5,764

## First: Choose the correct answer

- a. The **smallest** 6-different-digit number is  
 $100,000$  ☐  $173,456$  ☒  $102,345$  ☐
- b. Three hundred three thousand, three hundred and three =  
 $1303,303$  ☐  $300,033$  ☒  $330,303$  ☐
- c. The **value** of the digit 0 in 350,367 is  
 $10,000$  ☒  $1,000$  ☐  $(0)$  ☐
- d. The number that comes just **after** 209,999 is  
 $300,000$  ☐  $209,998$  ☒  $210,000$  ☐
- e. 25 Thousands + 6 Ones + 7 Hundreds + 9 Tens =  
 $25,679$  ☒  $25,796$  ☐  $25,769$  ☐

## Second: Complete the following:

- a. The **greatest** 6-digit number formed from the digits 3, 5 and 7  
 is **777,753**      b.  $210,250 = 250 +$  **250,000**  
 The place value of 0 in 405,612 is **Ten Thousands**
- b. 8 Tens + 502 Thousands + 7 Ones + 2 Hundreds = **502,287**  
 $8 \times$  **4** ,  $+ (8 \times$  **7**  $) = 32 + 56 =$  **88**

## Third: Answer the following.

### a. Find the result

$4 \times 6 =$  **24**       $2 \times 9 =$  **18**       $12 \div 3 =$  **4**

### b. Arrange the following numbers in an ascending order

**200**      **999**      **50,000**      **200**      **6,000**  
**200**      **999**      **6,000**      **10,000**      **50,000**

### Use the opposite figure to find:

- Area = **10** square cm  
 • Perimeter = **14** cm



# LESSON 5

1 Use the Place Value Strategy to add:

Ⓐ  $253 + 124 = 377$

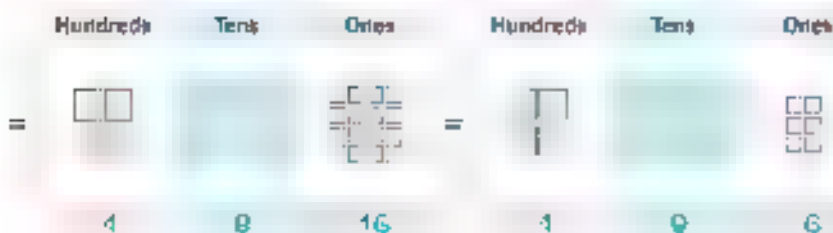
Hundreds	Tens	Ones		Hundreds	Tens	Ones
			+			
2	5	3		1	2	4
Hundreds	Tens	Ones	=	Hundreds	Tens	Ones
3	7	7				

Ⓑ  $310 + 235 = 545$

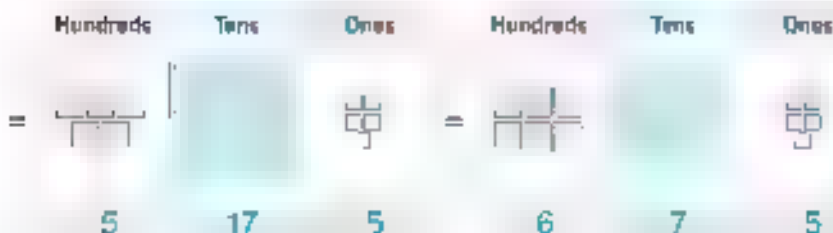
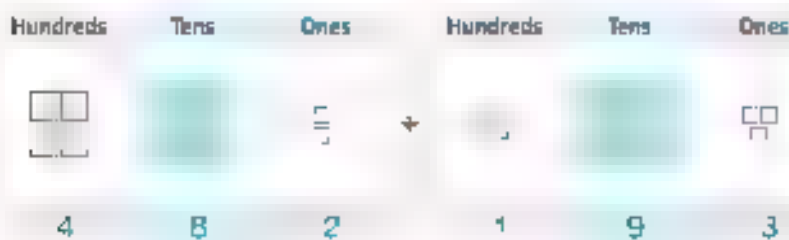
Hundreds	Tens	Ones		Hundreds	Tens	Ones
			+			
3	1	0		2	3	5
Hundreds	Tens	Ones	=	Hundreds	Tens	Ones
5	4	5				



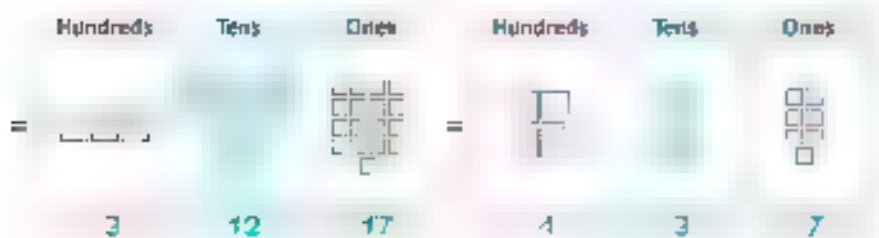
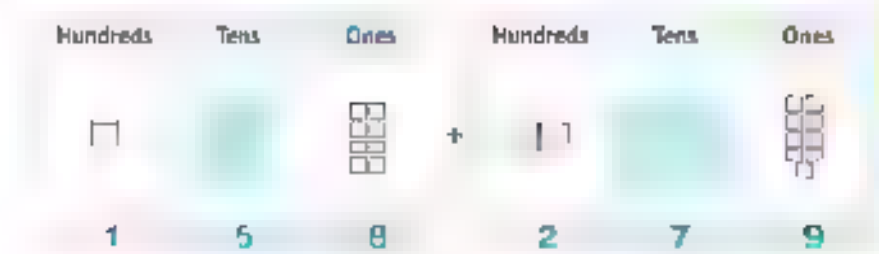
Ⓒ  $287 + 209 = 496$



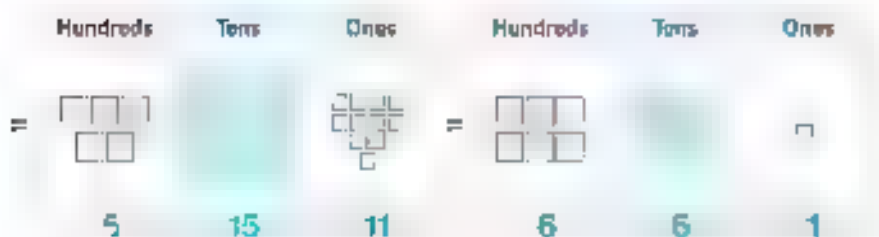
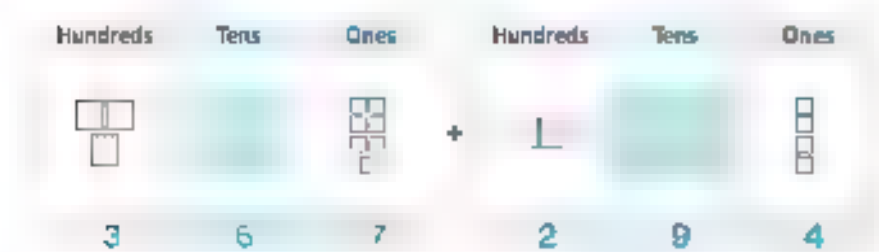
Ⓓ  $482 + 193 = 675$



$$\textcircled{1} 158 + 279 = 437$$



$$\textcircled{2} 567 + 294 = 861$$







## 2 Use the Expanded Form Strategy to add

	Problem	Work Space	Sum
Ⓐ	$253 + 124$	$200 + 100 + 300$ $+ 50 + 20 + 70$ $+ 3 + 4 + 7$	977
Ⓑ	$376 + 342$	$300 + 300 + 600$ $+ 70 + 40 + 110$ $+ 6 + 2 + 8$	718
Ⓒ	$128 + 439$	$100 + 400 + 500$ $+ 20 + 30 + 60$ $+ 8 + 9 + 17$	567
Ⓓ	$428 + 297$	$400 + 200 + 600$ $+ 20 + 90 + 110$ $+ 8 + 7 + 15$	725
Ⓔ	$108 + 692$	$100 + 600 + 700$ $+ 0 + 90 + 90$ $+ 8 + 2 + 18$	800
Ⓕ	$5,125 + 3,753$	$5,000 + 3,000 + 8,000$ $+ 100 + 70 + 800$ $+ 20 + 50 + 70$ $+ 5 + 3 + 8$	8,878
Ⓖ	$6,287 + 1,521$	$6,000 + 1,000 + 7,000$ $+ 200 + 500 + 700$ $+ 80 + 20 + 100$ $+ 7 + 1 + 8$	7,808

①	$2,458 + 3,451$	$2,000 + 400 + 50 + 8$ $3,000 + 400 + 50 + 1$ $5,000 + 800 + 100 + 9$	5,909
②	$6,666 + 2,314$	$6,000 + 600 + 60 + 6$ $2,000 + 300 + 10 + 4$ $8,000 + 900 + 70 + 10$	8,980
③	$7,357 + 242$	$7,000 + 300 + 50 + 7$ $+ 200 + 40 + 2$ $7,000 + 500 + 90 + 9$	7,599
④	$6,824 + 257$	$6,000 + 800 + 20 + 4$ $+ 200 + 50 + 7$ $6,000 + 1,000 + 70 + 11$	7,081

3 Use the **Number Line Strategy** to add:

Problem	Work Space	Sum
① $356 + 243$	$+ 200 + 40 + 3$ 	599
② $147 + 237$	$+ 100 + 40 + 7$ 	384



Ⓒ	$124 + 773$	$\begin{array}{ccccccc} & +100 & +20 & +4 & & & \\ \hline & 773 & 873 & 893 & 897 & & \end{array}$	897
Ⓓ	$257 + 212$	$\begin{array}{ccccccc} & +200 & +10 & +2 & & & \\ \hline & 257 & 457 & 467 & 469 & & \end{array}$	469
Ⓔ	$624 + 421$	$\begin{array}{ccccccc} & +100 & +20 & +1 & & & \\ \hline & 624 & 1\,024 & 1\,044 & 1\,045 & & \end{array}$	1 045
Ⓕ	$3\,125 + 4\,234$	$\begin{array}{ccccccc} & +3\,000 & +100 & +20 & +5 & & \\ \hline & 3\,125 & 7\,125 & 7\,145 & 7\,165 & 7\,170 & \end{array}$	7 359
Ⓖ	$3,561 + 2,533$	$\begin{array}{ccccccc} & +2\,000 & +500 & +30 & +3 & & \\ \hline & 3,561 & 5,561 & 6,061 & 6,091 & 6\,094 & \end{array}$	6 094
Ⓙ	$4,258 + 3,124$	$\begin{array}{ccccccc} & +3\,000 & +100 & +20 & +4 & & \\ \hline & 4,258 & 7\,258 & 7\,378 & 7\,382 & & \end{array}$	7,382
Ⓚ	$8,124 + 325$	$\begin{array}{ccccccc} & +300 & +20 & +5 & & & \\ \hline & 8,124 & 8\,424 & 8\,444 & 8\,449 & & \end{array}$	8,449
Ⓛ	$3,587 + 413$	$\begin{array}{ccccccc} & +400 & +10 & +3 & & & \\ \hline & 3,587 & 3\,987 & 3\,997 & 4\,000 & & \end{array}$	4 000

4. Find the sum of each of the following.

$$\textcircled{a} \quad \begin{array}{r} 123 \\ + 245 \\ \hline \end{array}$$

$$+ 245$$

$$368$$

$$\textcircled{b} \quad \begin{array}{r} 325 \\ + 6 \\ \hline \end{array}$$

$$+ 6$$

$$331$$

$$\textcircled{c} \quad \begin{array}{r} 4,778 \\ + 1,889 \\ \hline \end{array}$$

$$+ 1,889$$

$$6,667$$

$$\textcircled{d} \quad \begin{array}{r} 126 \\ + 96 \\ \hline \end{array}$$

$$+ 96$$

$$222$$

$$\textcircled{e} \quad \begin{array}{r} 378 \\ + 281 \\ \hline \end{array}$$

$$+ 281$$

$$659$$

$$\textcircled{f} \quad \begin{array}{r} 999 \\ + 1 \\ \hline \end{array}$$

$$+ 1$$

$$1,000$$

$$\textcircled{g} \quad \begin{array}{r} 676 \\ + 156 \\ \hline \end{array}$$

$$+ 156$$

$$+ 37$$

$$869$$

$$\textcircled{h} \quad \begin{array}{r} 722 \\ + 278 \\ \hline \end{array}$$

$$+ 278$$

$$+ 199$$

$$1,199$$

$$\textcircled{i} \quad \begin{array}{r} 795 \\ + 6,172 \\ \hline \end{array}$$

$$+ 6,172$$

$$+ 1,988$$

$$8,955$$

$$\textcircled{1} \quad 265 + 73 = 338$$

$$\textcircled{2} \quad 222 + 399 = 621$$

$$\textcircled{3} \quad 499 + 1 = 500$$

$$\textcircled{4} \quad 3,369 + 455 = 3,824$$

$$\textcircled{5} \quad 4,666 + 2,254 = 6,920$$

$$\textcircled{6} \quad 2,456 + 2,487 = 4,943$$

## First: Choose the correct answer

- a The **largest** 6-digit even-digit number is  
 999 999 ☒ 167,654 ☐ 123 456
- b 850 thousand 58 =  
 85,058 ☒ 8 585 ☐ 850 058
- c  $50 \times 800 =$   
 4,000 ☐ 40,000 ☒ 400,000
- d  $250.0 \div 5 = 25 +$   
 $+ 50.000$  ☒ 250 ☐  $\times 500$
- e The **value** of the digit 8 in 287 156 is  
 ( 80,000 ) ☒ 8,000 ☐ 80 )

## Second: Complete the following:

- a  $(4 \times 7) + (4 \times 7) =$  **28**  $+$  **28**  $=$  **56**
- b 3 Ones + 581 Thousands + 8 Tens = **581 083**
- c **7**  $\div 1 = 7$
- d The number that comes just **after** 99 999 is **100 000**
- e **100 000**

## Third: Answer the following.

### a Find the result

- ①  $4\,568 + 512 =$  **5 080**      ②  $8,002 + 1\,527 =$  **9 529**
- ③  $800,000 + 210 + 30,000 =$  **830 210**

### b Order the following numbers in an ascending order

**500**   **500,000** , **50**   **50,000** , **5,000**

**50**   **500**   **5 000**   **50 000**   **500 000**

### c Add using the Number Line Strategy

$$256 + 724 = \mathbf{980}$$

$$\begin{array}{c} +200 \\ +50 \\ +6 \end{array}$$

724   924   974   980

# Lesson 6

- 1 Solve the following subtraction problems using the **Place value Picture Strategy**.

Ⓐ  $685 - 324 = 361$

Hundreds

3

Check:  $324 + 361 = 685$

Tens

6

Ones

8

Ⓑ  $457 - 252 = 205$

Hundreds



2

Check:  $252 + 205 = 457$

Tens

0

Ones

5

Ⓒ  $713 - 252 = 461$

Hundreds



4

Check:  $252 + 461 = 713$

Tens

6

Ones

1

Ⓓ  $256 - 148 = 108$

Hundreds



1

Check:  $148 + 108 = 256$

Tens

0

Ones

8



$$\textcircled{c} 5,476 - 1,236 = 4,240$$

Thousands	Hundreds	Tens	Ones
4	2	4	0

$$\text{Check } 1,236 + 4,240 = 5,476$$

$$\textcircled{d} 9,563 - 8,173 = 1,390$$

Thousands	Hundreds	Tens	Ones
1	3	9	0

$$\text{Check } 8,173 + 1,390 = 9,563$$

$$\textcircled{e} 6,345 - 2,582 = 3,763$$

Thousands	Hundreds	Tens	Ones
3	7	6	3

$$\text{Check } 2,582 + 3,763 = 6,345$$

$$\textcircled{f} 9,023 - 1,281 = 7,742$$



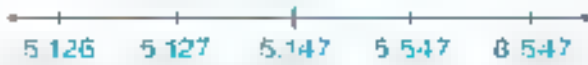


Thousands	Hundreds	Tens	Ones
7	7	4	2

$$\text{Check } 1,281 + 7,742 = 9,023$$

- 2 Solve the subtraction problems below, using the Number Line Strategy.

6

	Subtraction Problem	Check
A	$753 - 241 = 512$ 1      40      200 	$+ 241$ $+ 512$ 753
B	$856 - 215 = 641$ 5      10      200 	$+ 215$ $+ 641$ 856
C	$777 - 253 = 524$ 3      50      -200 	$+ 253$ $+ 524$ 777
D	$654 - 129 = 525$ 2      -20      100 	$+ 129$ $+ 525$ 654
E	$654 - 294 = 360$ 4      90      200 	$+ 294$ $+ 360$ 654

<p>①</p>	<p><math>7,852 - 324 = 7,528</math></p> <p>4      20      300</p>  <p>7,528   7,552   7,572   7,852</p>	$\begin{array}{r} 324 \\ + 7,528 \\ \hline 7,852 \end{array}$
<p>②</p>	<p><math>9,529 - 283 = 9,246</math></p> <p>3      80      200</p>  <p>9,246   9,269   9,349   9,529</p>	$\begin{array}{r} 283 \\ + 9,246 \\ \hline 9,529 \end{array}$
<p>③</p>	<p><math>8,547 - 3,421 = 5,126</math></p> <p>1      20      400      3,000</p>  <p>5,126   5,146   5,166   5,566   8,566</p>	$\begin{array}{r} 3,421 \\ + 5,126 \\ \hline 8,547 \end{array}$
<p>④</p>	<p><math>6,542 - 2,217 = 4,325</math></p> <p>7      10      200      2,000</p>  <p>4,325   4,335   4,345   4,545   6,545</p>	$\begin{array}{r} 2,217 \\ + 4,325 \\ \hline 6,542 \end{array}$
<p>⑤</p>	<p><math>7,000 - 1,423 = 5,577</math></p> <p>3      20      400      1,000</p>  <p>5,577   5,597   5,617   5,917   6,917</p>	$\begin{array}{r} 1,423 \\ + 5,577 \\ \hline 7,000 \end{array}$

## 3 Subtract:

$$\textcircled{a} \quad \begin{array}{r} 753 \\ - 245 \\ \hline \end{array}$$

$$\quad - 245$$

$$\quad \underline{508}$$

$$\textcircled{b} \quad \begin{array}{r} 456 \\ - 321 \\ \hline \end{array}$$

$$\quad - 321$$

$$\quad \underline{135}$$

$$\textcircled{c} \quad \begin{array}{r} 4978 \\ - 1889 \\ \hline \end{array}$$

$$\quad - 1889$$

$$\quad \underline{3089}$$

$$\textcircled{d} \quad \begin{array}{r} 218 \\ - 5 \\ \hline \end{array}$$

$$\quad - 5$$

$$\quad \underline{213}$$

$$\textcircled{e} \quad \begin{array}{r} 778 \\ - 281 \\ \hline \end{array}$$

$$\quad - 281$$

$$\quad \underline{497}$$

$$\textcircled{f} \quad \begin{array}{r} 4997 \\ - 448 \\ \hline \end{array}$$

$$\quad - 448$$

$$\quad \underline{4549}$$

$$\textcircled{g} \quad \begin{array}{r} 705 \\ - 78 \\ \hline \end{array}$$

$$\quad - 78$$

$$\quad \underline{627}$$

$$\textcircled{h} \quad \begin{array}{r} 1,000 \\ - 1 \\ \hline \end{array}$$

$$\quad - 1$$

$$\quad \underline{999}$$

$$\textcircled{i} \quad \begin{array}{r} 2,708 \\ - 1,378 \\ \hline \end{array}$$

$$\quad - 1,378$$

$$\quad \underline{1330}$$

$$\textcircled{1} \quad 265 - 73 = \quad \underline{192}$$

$$\textcircled{2} \quad 622 - 399 = \quad \underline{223}$$

$$\textcircled{3} \quad 491 - 9 = \quad \underline{482}$$

$$\textcircled{4} \quad 3,369 - 455 = \quad \underline{2,914}$$

$$\textcircled{5} \quad 4,656 - 2,264 = \quad \underline{2,392}$$

$$\textcircled{6} \quad 3,086 - 2,457 = \quad \underline{629}$$



# Accumulative Assessment

## 29 up to Lesson 6

**First:** Choose the correct answer

- a Nine hundred thousands, ninety nine =  
999,000 ☒ 900,990 ☐ 900,099
- b The **value** of the digit 5 in 259,924 is  
50,000 ☒ 500,000 ☐ 5,000
- c  $800 + 200,000 + 60 + 30,000 + 7 + 9,000 =$   
826,379 ☒ 239,867 ☐ 237,896
- d The number that comes just **after** 80,999 is  
81,000 ☒ 90,999 ☐ 80,100
- e The **smallest** 5-digit different-digit number is  
12,345 ☒ 98,765 ☐ 10,234

**Second:** Complete the following:

- a The **triangle** has **3** sides, **3** angles, and **3** vertices.
- b  $8 + 8 + 8 + 8 + 8 =$  **5**  $\times$  **8**
- c  $9 \times 3 =$  **3**  $\times 9$
- d  $9 \times 6 = (10 \times 6) -$  **6**
- e The perimeter of the opposite figure is **12** units



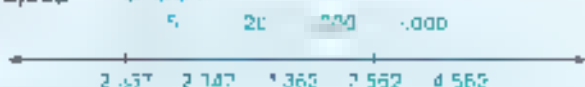
**Third:** Answer the following.

Use the **Number Line Strategy** to find

$459 + 262 =$  **721**



$4,562 - 2,225 =$  **2,337**



# Lesson 7

7

- 1 The following table shows the number of students in each grade in a school. Use this information to answer the questions below:

Grade	P1	P2	P3	P4	P5
Number of Students	354	371	478	203	139

Answer the following questions:

- Ⓐ How many students are there in P1 and P4 altogether?  $354 + 203 = 557$  students
- Ⓑ How many students are there in P3, P4 and P5 altogether?  $478 + 203 + 139 = 820$  students
- Ⓒ How many more students are there in P3 than in P2?  $478 - 371 = 107$  students
- Ⓓ What is the class with the largest number of students? **P3**
- Ⓔ Which class has the fewest students? **P5**

- 2 The following table shows the lengths of some of the world's longest rivers. Use the information to answer the questions below:

River	Approximate Length in Km
Nile	About 6,600 km
Amazon	About 6,400 km
Mississippi	About 3,775 km
Euphrates	About 2,800 km

Answer the following questions:

- Ⓐ What is the longest river? **Nile river**
- Ⓑ What is the shortest river? **Euphrates river**



- Ⓒ What is the total length of the Mississippi river and the Amazon river together?  $3,775 + 6,400 = 10,175 \text{ km}$

- Ⓓ What is the total length of the Tigris river and the Nile river together?  $2,800 + 6,650 = 9,450 \text{ km}$

- Ⓔ How many more kilometers is the Nile than the Tigris?  $6,650 - 2,800 = 3,850 \text{ km}$

**3 Read each story problem and decide on a strategy to solve it.**

- Ⓐ Amir's family is saving to buy a new TV. The TV costs 5,940 LE on sale. They have saved 4,210 LE so far.

How much more money do they need to buy the TV?

$$5,940 - 4,210 = 1,730 \text{ LE}$$

- Ⓑ Mr. Mahmoud raises chickens in his farm. In the past two years, his chickens have laid 5,350 eggs. Last year, his chickens laid 2,120 eggs.

How many eggs did his chickens lay two years ago?

$$5,350 - 2,120 = 3,230 \text{ eggs}$$

- Ⓒ Mr. Mahmoud raises sheep on his farm. One day he took 235 sheep out to graze on a hill. Later, his neighbor brought his sheep to the same hillside. Now there are 680 sheep on the hill.

How many sheep did the neighbor bring to the hillside?

$$680 - 235 = 445 \text{ sheep}$$

- Ⓓ The library can hold 2,475 books, but 525 books are borrowed and 137 books are missing.

How many books are there in the library right now?

$$525 + 137 = 662 \text{ books}$$
$$2,475 - 662 = 1,813 \text{ books}$$

- ③ Omar just moved to the city. He found an apartment to rent for

3,340 LE per month. Electricity and gas will cost him 692 LE per month.

How much money will it cost him each month to live there?

$$3,340 + 692 = 4,032 \text{ LE}$$

Omar had 5,000 LE to spend each month.

How much money does he have left after he pays for rent, electricity, and gas?

$$5,000 - 4,032 = 968 \text{ LE}$$

- ④ Three boxes filled with books were just delivered to the library. If each box is filled with 215 books, how many books were delivered?

$$215 + 215 + 215 = 645 \text{ books}$$

- ⑤ A number that has 5 Thousands, 7 Hundreds, 6 Tens, and 4 Ones

What number is it?

$$5,764$$

- ⑥ A number that has 12 Hundreds, 15 Tens, and 6 Ones.

What number is it?

$$1,200 + 150 + 6 = 1,356$$

## First: Choose the correct answer

- a The **smallest** 6 different-digit number is  
 $100,000$  ☐  $123\,456$  ☒  $102\,345$
- b Three hundred three thousand, three hundred and three =  
 $\{303,303\}$  ☒  $300,033$  ☐  $330\,303$
- The **value** of the digit 0 in 350, 675  
 $10,000$  ☐  $1,000$  ☒  $0$
- d The number that comes just **after** 209 999 is  
 $300,000$  ☒  $209\,998$  ☐  $210\,000$
- e 25 Thousands + 6 Ones + 7 Hundreds + 9 Tens =  
 $\{25,679\}$  ☒  $25,796$  ☐  $25,769$

## Second: Complete the following:

- a  $6 \times 3 = 9$
- b  $5 \times 7 = \{5 \times 4\} + \{5 \times 3\}$
- c  $9 \times 3 = 3 \times 9$
- d  $45 + 9 = 5$       e  $12 + 0 = 12$

## Third: Answer the following:

- a **Find the result**  
 $456 + 643 = 1\,099$       e  $4,020 - 29 = 3,891$
- b **Arrange the following numbers in an ascending order**  
 $10,000, 999, 50,000, 200, 6,000$   
 $200, 999, 6\,000, 10,000, 50\,000$
- Mona has 545.L.E and Nada has 235.L.E  
 How much money do they have altogether?  
 They have =  $545 + 235 = 780$  L.E

## Lessons 8&amp;9

1 Circle the container that has the **largest** capacity.

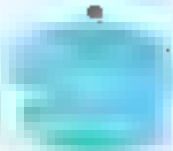
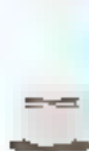
a



b



c



d



e



f

2 Circle the container that has the **smallest** capacity.

a



b



©



©



©



©



3 What is **better** for measuring the volume of liquid in capacity, in **milliliters** or **liters**?



Petrol in a car

Milliliter

Liter

©



Ketchup in a bottle

Milliliter

Liter

©



Spoonful of medicine

Milliliter

Liter

©



Juice in a juice box

Milliliter

Liter

©



Oil in a bottle

Milliliter

Liter

©



Shampoo in a bottle

Milliliter

Liter

B



Tea in a cup

☐ Milliliter ☐ Liter


Water in a bathtub

☐ Milliliter ☐ Liter

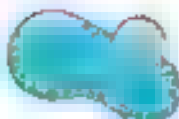
C



Perfume in a bottle

☐ Milliliter ☐ Liter

D



Water in a pool

☐ Milliliter ☐ Liter

E



Water in a bottle

☐ Milliliter ☐ Liter

F



Coffee in a cup

☐ Milliliter ☐ Liter

G



Dishwashing soap

☐ Milliliter ☐ Liter

H



Milk in a bottle

☐ Milliliter ☐ Liter

I



Soda in a can

☐ Milliliter ☐ Liter

## 4 Complete the following:

☐ 2 liters = **2,000** milliliters

☐ 5 liters = **5 000** milliliters

☐ 7 liters = **7 000** milliliters

☐ 9 liters = **9,000** milliliters

☐ 25 liters = **25,000** milliliters

☐ 10 liters = **10 000** milliliters

☐ 4,000 milliliters = **4** liters

☐ 6,000 milliliters = **6** liters

☐ 90,000 milliliters = **90** liters

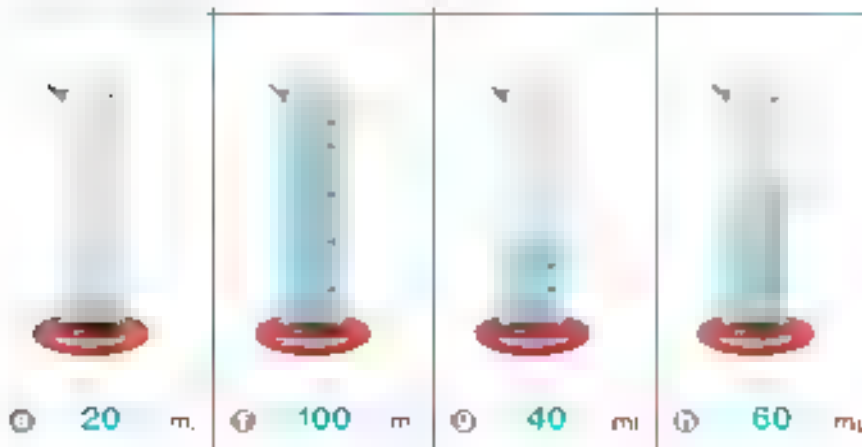
☐ 20,000 milliliters = **20** liters





- ① To measure the capacity of the **soda can**, we use **milli liter**
- ① To measure the capacity of the **swimming pool**, we use **liter**
- ① The **liter** is used to measure **capacity**
- ① The **milliliter** is used to measure **capacity**
- ① The **graduated cylinder** is a tool for measuring **capacity**

**5 Write the capacity of each of the following:**



# Accumulative Assessment

## 31 up to Lesson 9

**First:** Choose the correct answer

- a  $8 \text{ liters} =$                       **milliliters**                       $6,000$  ☐  $800$  ☒  $80$   
 $7 + 7 + 7 + 7 =$                        $17 \times 4$  ☒  $7 + 4$  ☐  $7 \times 7$
- c  $80 \times 3 =$                        $\times 40$                        $240$  ☒  $6$  ☐  $60$
- d The capacity of a **cup of tea** is                       $6 \text{ te}$  ☒  $800 \text{ ml}$  ☐  $200 \text{ ml}$
- e                      is a unit of measuring **capacity**                      Hour ☐ Meter ☒ Liter

**Second:** Complete the following:

- a  $9,000 \text{ ml/liter} =$                       **9**                      liter
- b The volume of **water in a pool** is measured by                      **liter**
- c The number that comes just **after**  $99,999$  is                      **100,000**
- d  $20 \text{ cm} =$                       **200**                      mm
- e The **smallest** 5 different-digit number is                      **10 234**

**Third:** Answer the following

- a **Find the result**  
 $9 \times 13 =$                        $90 + 27 =$                        $17$                        $72 \div 8 =$                       **9**  
 $899 + 1,001 =$                       **1,900**                       $47 \div 6 =$                       **7**
- b **If each book costs 9LE, how many books can you buy with 63LE?**  
 **$63 \div 9 = 7$  Books**

**Write the suitable unit (milliliter or liter)**

①



Coffee in a cup  
**Milliter**

②



Water in a bottle  
**L iter**

③



Soda in a can  
**M illiter**

④



Petrol in a car  
**L iter**

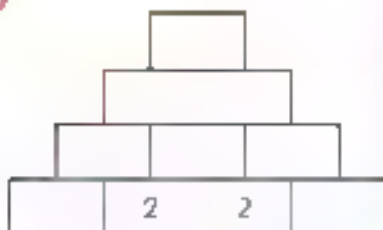
# PUZZLE

- 1 Complete the opposite figure so that the sum of each column and each row is 81

	23		- 8
25	27		- 8
	3	24	- 8
81	81	81	

- 2 Complete the following figures so that the product of any adjacent numbers is the number directly above them

②



⑦



- 3 Fill in the missing numbers and signs.

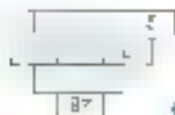
$$8 \times 22 = \square$$

$$+ 4 = \square$$

$$\times \square = 20$$

$$+ 3 = \square$$

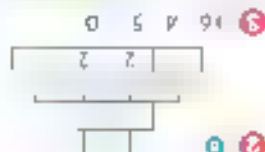
ANSWERS



3<sup>rd</sup> Row  $\rightarrow 25$

③

2<sup>nd</sup> Row  $\rightarrow 20$



⑥

⑦

1<sup>st</sup> Row  $\rightarrow 30$

2<sup>nd</sup> Row  $\rightarrow 20$

# General Exercises

Exercice 1 : Les poids de 21 enfants

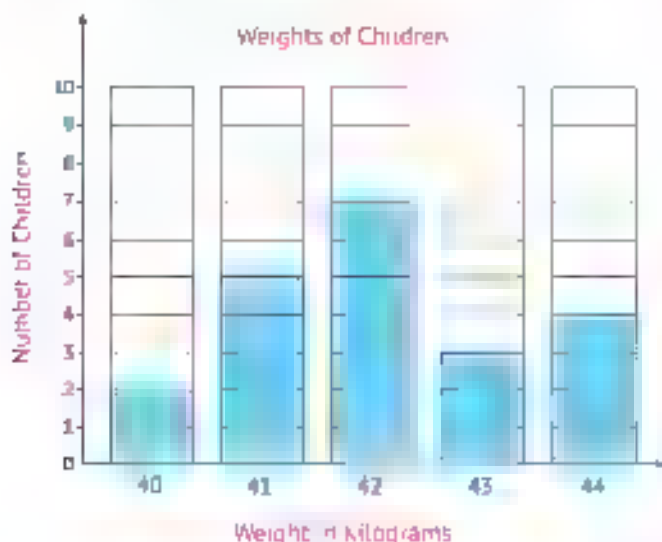
- 1 The following numbers show the **weights** of 21 children (in kilograms)

40 , 44 , 42 , 44 , 42 , 41 , 42  
 43 , 43 , 42 , 41 , 44 , 41 , 40  
 41 , 42 , 43 , 44 , 42 , 42 , 41

- a Complete the following tally table

Weight	40	41	42	43	44
Tallies					
Number of Children	2	5	7	3	4

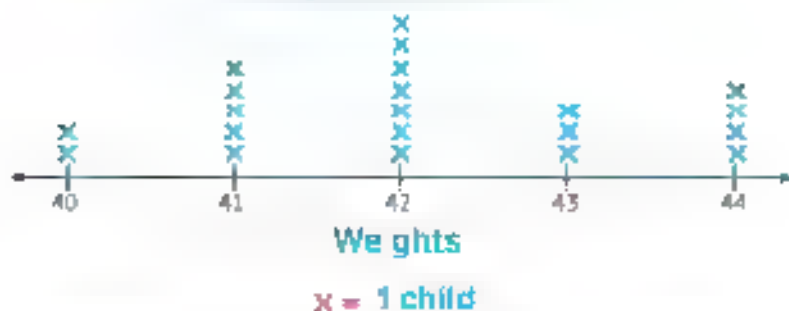
- b Complete the following bar graph:



## Final Revision

### C. Create a line plot.

Weights of Children

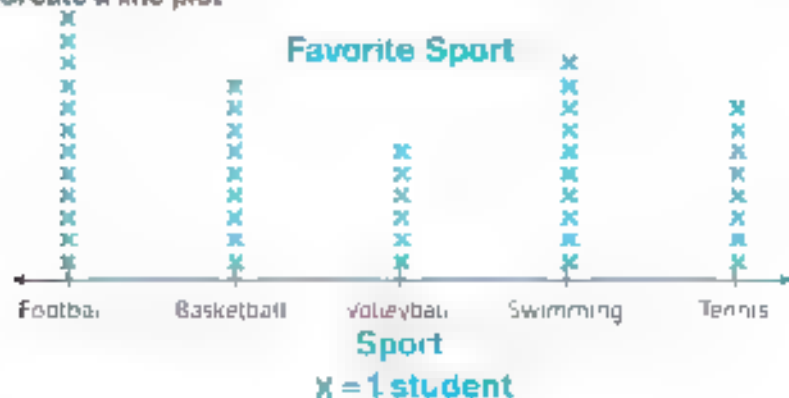


### 2. The following table shows the students' favorite sport.

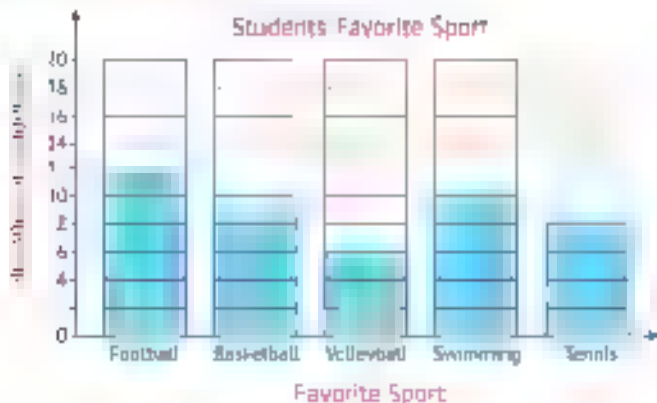
#### a. Complete the table.

Favorite Sport	Football	Basketball	Volleyball	Swimming	Tennis
Tallies					
Number of Students	12	9	6	10	8

#### b. Create a line plot.



c Complete the following bar graph



d Answer the following questions

- 1 The number of students who prefer **Football** is **12**
- 2 The number of students who prefer **Volleyball** is **8**
- 3 The number of students who prefer **Football** and **Basketball** together is **22**  
 $12 + 10 = 22$
- 4 The sport preferred by the **most** number of students is **Football**
- 5 The sport preferred by the **least** number of students is **Tennis**



**First**

Choose the correct answer

Seven hundred thousand, seventy (in standard form) is

☐ 700,070 ☒ 70,070 ☐ 700,700

Ninety four thousand, nine hundred four (in standard form) is

☐ 940,904 ☒ 94,904 ☐ 94,094

$70,000 + 5,000 + 800 + 50 + 6 =$

☐ 705,856 ☒ 750,856 ☐ 75,856

$4 + 800,000 + 600 + 2,000 =$

☐ 4,862 ☒ 802,604 ☐ 820,604

45 Thousands + 8 Hundreds + 6 Ones =

☐ 45,806 ☒ 450,886 ☐ 4,506

20 Thousands + 50 Hundreds =

☐ 205,000 ☒ 20,500 ☐ 25,000

500 Hundreds =                      Thousands                      50 ☒                      500 ☐                      5,000

80 Thousands =                      Hundreds                      800 ☒                      8,000 ☐                      80,000

4,000 Tens =                      Thousands                      4 ☒                      40 ☐                      4,000

The value of the digit 7 in 37,856 is

☐ 700 ☒ 7,000 ☐ 70,000

The value of the digit 0 in 75,036 is

☐ 0 ☒ 100 ☐ 1,000

The place value of the digit 4 in 85,447 is

☐ Ones ☒ Tens ☐ Hundreds

The place value of the digit 6 in 765,217 is

☐ Thousands ☒ Ten Thousands ☐ Hundred Thousands

14. The **smallest** 5-digit number is

10,000 ☒ 10,234 ☒ 99,999

15. The **greatest** 6-digit number is

100,000 ☒ 999,999 ☒ 98,765

16. The **greatest** 4-different-digit number is

1,023 ☒ 9,999 ☒ 9,876

17. The **smallest** 4-different-digit number is

1,234 ☒ 1,023 ☒ 1,111

18. The **greatest** number that can be formed from the digits

5 3 8 4 and 6 is 53,846 ☒ 36,543 ☒ 34,568

19. The **smallest** number that can be formed from the digits

7 9 0 3 and 1 is 13,290 ☒ 97,310 ☒ 10,379

20. The **greatest** 5-digit number that can be formed from the digits

4 8 and 2 is 88,842 ☒ 80,042 ☒ 84,222

21. The number that comes just **after** 45,099 is

45,000 ☒ 46,000 ☒ 45,100

22. The number \_\_\_\_\_ comes just **after** 70,010

70,009 ☒ 70,011 ☒ 70,020

23. 78,099 comes just **before**

79,000 ☒ 78,100 ☒ 78,098

24. The number that comes just **before** 10,000 is

9,999 ☒ 10,001 ☒ 99,998

25. 45,025

45,205

< ☒ = ☒ >

26. 70 Thousands

7,000 Tens

< ☒ = ☒ >

27.  $5 + 30 + 700 + 9,000$

5,379

< ☒ = ☒ >





### Final Revision

Ⓐ 900 Thousands + 90 Tens

900,090

< 90 = 90 >

Ⓑ 543 + 457

10 Hundreds

< 9 = 9 >

Ⓒ 9,000 + 458

6 257 + 2,623

< 90 = 90 >

### Second: Complete the following:

25 325 (in word form) **Twenty five thousand, three hundred, twenty-five**

902,019 (in word form) **Nine hundred two thousand, nineteen**

3 78 122 (in expanded form) **70 000 + 8,000 + 100 + 70 + 2**

+ 650 + 56 (in expanded form) **600,000 + 50 00 + 200 + 50 + 6**

5 45 045 = 45 + **45,000**      6 200,200 = 200,000 + **200**

7 95 Thousands + 5 Hundreds + 3 Tens + 4 Ones = **95 534**

8 18 075 = **18** Thousands + **0** Hundreds + **2** Tens + **5** Ones

+ 800,012 = **2** Ones + **800** thousands + **1** Ten + **0** Hundreds

11 200 Hundreds - **2,000** Tens      10 Thousands = **100** Hundreds

12 40 Thousands = **4,000** Tens

The **value** of the digit 6 in 654,001 is **600,000**

4 The **value** of the digit 9 in 95,021 is **90 000**

15 The **place value** of the digit 0 in 24,017 is **Hundreds**

16 The **place value** of the digit 7 in 17123 is **Thousands**

The **smallest** 6-digit number is **100,000**

18 The **greatest** 5-digit number is **99,999**

19 The **greatest** 4 same-digit number is **9 999**

20 The **smallest** 4 same-digit number is **1,111**

The **greatest** number that can be formed from the digits

7, 8, 0, 9, 2 and 5) is **987,520**

- a. The **smallest** number that can be formed from the digits {4, 1, 8, 6 and 0} is **10,468**
- b. The **greatest** 6 digit number that can be formed from the digits {2, 9 and 4} is **999,942**
- c. The **smallest** 5-digit number that can be formed from the digits {5 and 7} is **55,557**
- d. The number that comes just after 99 999 is **100 000**
- e. The number **50 001** comes just after 50,000.
- f. 25,478 comes just after **25 477**
- g. 10 999 comes just before **11 000**
- h. The number that comes just before 50,100 is **50 099**
- i. The number **80 010** comes just before 80,020

**Thirds** Answer the following.

- 1 Write the number shown in the following table in the:

Thousands					
Hundreds	Tens	Ones	Hundreds	Tens	Ones
	7	4	5	1	3

Standard Form: **74,573**

Word Form: **Seventy four thousand five hundred seventy three**

Expanded Form  **$70\,000 + 4\,000 + 500 + 70 + 3$**

Units Form **74 Thousands + 5 Hundreds + 7 Tens + 3 Ones**

- 2 Write the number shown in the following table in the:

Thousands					
Hundreds	Tens	Ones	Hundreds	Tens	Ones
6	1	5	9	1	2

Standard Form: **615,912**

### Final Revision

Word Form: Six hundred fifteen thousand nine hundred two

Expanded Form  $600,000 + 10,000 + 5,000 + 900 + 10 + 2$

Units Form 615 Thousands + 9 Hundreds + 1 Ten + 2 Ones

- 3 Arrange the following numbers in an **ascending** order

a 75 205   75.025   75,510   75 502   75 250

75 025   75.205   75 250   75 502   75 520

b 99.999   10.000   99,000   100,000   9 999

9 999   10 000   99,000   99,999   100,000

- 4 Arrange the following numbers in a **descending** order

a 85,085   58,058   85,850   58,580   85,805

85,850   85 805   85 580   85 085   85 058

b 10,234   10.000   11 111   10,023   10,011

11 111   10,234   10 023   10 011   10 000

- 5 Use the **Place Value Strategy** to find

$$252 + 681 = 933$$

Hundreds	Tens	Ones
2	5	2

Hundreds	Tens	Ones
6	8	1

# General Exercises

Hundreds	Tens	Ones
8	13	3

Hundreds	Tens	Ones
9	3	3

$$b. 172 + 228 = 400$$

Hundreds	Tens	Ones
1	7	2

Hundreds	Tens	Ones
2	2	8

Hundreds	Tens	Ones
3	9	10

Hundreds	Tens	Ones
4	0	0


$$c. 649 + 128 = 777$$

Hundreds	Tens	Ones
5	1	7

$$\text{Check: } 128 + 517 = 645$$

# Final Revision

$$a) 5,124 - 2,516 = 2,608$$

Thousands	Hundreds	Tens	Ones
			
2	6	0	8

$$\text{Check } 2,516 + 2,608 = 5,124$$

**6** Use the expanded form strategy to find

$$782 + 126 = 908$$

$$700 + 80 + 2$$

$$100 + 20 + 6$$

$$800 + 100 + 8 = 908$$

$$b) 2,354 + 1,652 = 4,006$$

$$1,000 + 600 + 50 + 2$$

$$2,000 + 300 + 50 + 4$$

$$3,000 + 900 + 100 + 6 = 4,006$$

**7** Use the number line strategy to find

$$573 + 125 = 698$$



$$b) 6,215 + 1,286 = 7,501$$



$$\square 864 - 123 = 741$$



$$\square 4,615 - 387 = 4,228$$



### 8 Solve the following story problems.

- a Neha had **245** LE and Sama has **368** LE

How much money do they have altogether?

$$245 + 368 = 613 \text{ LE}$$

Omar had **7,158** LE he bought a TV set for **2,420** LE

Find the remaining money with Omar

$$7,158 - 2,420 = 4,738 \text{ LE}$$

Ahmed had **984** LE, he bought a shirt for **245** LE and trousers for **455** LE

How much money does he have left?

$$245 + 455 = 700 \text{ LE}$$

$$984 - 700 = 284 \text{ LE}$$

- b The total number of books in a library is **1,258** and **510** of which are borrowed and **200** are missing.

How many books are in the library now?

$$510 + 200 = 710 \text{ books}$$

$$1,258 - 710 = 548 \text{ books}$$



Choose the correct answer

1.  $5 + 5 + 5 + 5 =$  ☐ 20 ☒ 25 ☐ 30 ☐ 35
2.  $8 + 8 + 8 = 4 \times$  ☐ 8 ☒ 3 ☐ 16 ☐ 24
3.  $9 + 9 =$  ☐ 18 ☒ 27 ☐ 36 ☐ 45
4.  $4 \times 3 =$  ☐ 12 ☒ 15 ☐ 18 ☐ 21
5.  $6 \times 2 =$  ☐ 8 ☐ 10 ☒ 12 ☐ 14
6.  $\quad \times 8 = 4 \times 10$  ☐ 32 ☒ 40 ☐ 48 ☐ 56
7.  $4 \times \quad = 6 \times 6$  ☐ 24 ☒ 36 ☐ 48 ☐ 54
8.  $6 \times \quad = 54$  ☐ 9 ☒ 10 ☐ 11 ☐ 12
9.  $\quad \times 8 = 32$  ☐ 4 ☒ 8 ☐ 16 ☐ 24
10.  $4 \times 9 = 4 \times 5 + 4 \times$  ☐ 4 ☒ 5 ☐ 9 ☐ 10
11.  $0 = \quad = 0 \times 3 = 0 \times 7$  ☐ 0 ☒ 10 ☐ 100 ☐ 1000
12.  $\quad \times \quad = 3 \times 2 + 3 \times 4$  ☐ 6 ☒ 3 ☐ 8 ☐ 3 ☐ 6
13.  $5 \times 7 =$  ☐ 12 ☒ 35 ☐ 42 ☐ 49
14.  $(5 \times 3) + (5 \times 4) =$  ☐ 2 ☒ 3 ☐ 4 ☐ 5 ☐ 7 ☐ 8 ☐ 9
15.  $4 \times 10 =$  ☐ 14 ☒ 40 ☐ 140 ☐ 1400
16.  $8 \times \quad = 4000$  ☐ 50 ☒ 500 ☐ 5,000 ☐ 5,0000
17.  $50 \times \quad = 10,000$  ☐ 200 ☒ 2,000 ☐ 20,000 ☐ 200,000
18.  $400 \times \quad = 2,000$  ☐ 5 ☒ 50 ☐ 500 ☐ 5,000
19.  $8 \times 7 \times 10 = \quad \times 10$  ☐ 56 ☒ 60 ☐ 64 ☐ 70
20.  $5 \times 6 \times \quad = 3 \times 100$  ☐ 30 ☒ 10 ☐ 300 ☐ 3,000
21.  $\quad \times 8 \times 10 = 4 \times 100$  ☐ 400 ☒ 4 ☐ 40 ☐ 4000
22.  $6 \times 30 = \quad \times 10$  ☐ 180 ☒ 18 ☐ 6 ☐ 30
23.  $4 \times 20 = 8 \times$  ☐ 10 ☒ 100 ☐ 20 ☐ 200
24.  $60 \times 20 =$  ☐ 12 ☒ 120 ☐ 1,200 ☐ 12,000

# General Exercises

$$400 \times \quad = 24,000$$

$$50 \times \quad = 10,000$$

$$9 \times 7 = 10 \times 7$$

$$9 \times \quad = 10 \times 6 \quad 6$$

$$14 \div 4 =$$

$$\div 2 = 9$$

$$36 \div \quad = 4$$

$$6 \text{ or } 60 \text{ or } 600$$

$$(20 \text{ or } 200 \text{ or } 2,000)$$

$$1 \text{ or } 9 \text{ or } 7$$

$$(6 \text{ or } 7 \text{ or } 9)$$

$$(4 \text{ or } 6 \text{ or } 3)$$

$$(18 \text{ or } 9 \text{ or } 16)$$

$$(9 \text{ or } 8 \text{ or } 6)$$

**Second:** Complete the following:

$$1 \quad 7 + 7 + 7 + 7 + 7 = 7 \times 5$$

$$2 \quad 4 + 4 + 4 = 2 \times 6$$

$$3 \quad 4 \times 4 = 8 + 8$$

$$4 \quad 7 \times 3 = 7 + 7 + 7$$

$$5 \quad 9 \times 8 = 8 \times 9$$

$$6 \quad 5 \times 6 = 3 \times 10$$

$$7 \quad 5 \times 4 = 2 \times 10$$

$$8 \quad 9 \times 7 = 63$$

$$4 \times 7 = 28$$

$$9 \quad 6 \times 7 = (6 \times 2) + (6 \times 5)$$

$$10 \quad 3 \times 8 = (3 \times 6) + (3 \times 2)$$

$$11 \quad 9 \times 10 = (9 \times 7) + 9 \times 3$$

$$12 \quad 3 \times 9 = (3 \times 2) + (3 \times 7)$$

$$13 \quad 8 \times 10 = 80$$

$$4 \quad 6 \times 2,000 = 12,000$$

$$15 \quad 70 \times 200 = 14,000$$

$$16 \quad 500 \times 4 = 2,000$$



# Final Revision

16  $7 \times 6 \times 10 = 42 \times 10$

17  $5 \times 6 \times 10 = 3 \times 100$

18  $3 \times 30 = 9 \times 10$

19  $900 \times 70 = 63,000$

20  $4 \times 5 = 10 \times 5 = 5$

21  $28 \div 4 = 7$

22  $72 \div 8 = 9$

23  $5 \times 8 \times 10 = 4 \times 100$

24  $8 \times 60 = 48 \times 10$

25  $40 \times 40 = 1,600$

26  $50 \times 20 = 1,000$

27  $4 \times 4 = 10 \times 4 = 4$

28  $42 \div 7 = 6$

**Third:** Answer the following:

1 Complete in the same pattern

a  $0, 2, 4, 6, 8, 10, 12, 14, 16$

b  $30, 27, 24, 21, 18, 15, 12, 9$

c  $0, 8, 16, 24, 32, 40, 48, 56, 64$

d  $90, 81, 72, 63, 54, 45, 36, 27$

2 Look at each array, then complete:



a 3 rows of 4

$3 \times 4 = 12$



b 2 rows of 6

$2 \times 6 = 12$



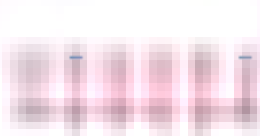
c 4 rows of 5

$4 \times 5 = 20$



d 4 columns of 3

$4 \times 3 = 12$



e 6 columns of 2

$6 \times 2 = 12$



f 5 columns of 4

$5 \times 4 = 20$

**3 Complete using the Commutative Property. Mathematical 11**

$$5 \times 3 = 15$$

$$\text{So, } 5 \times 3 = 3 \times 5$$



$$3 \times 5 = 15$$

c.



$$5 \times 6 = 30$$

$$\text{So, } 5 \times 6 = 6 \times 5$$

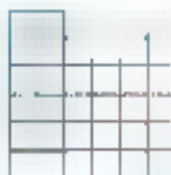


$$6 \times 5 = 30$$



$$2 \times 5 = 10$$

$$\text{So, } 2 \times 5 = 5 \times 2$$



$$5 \times 2 = 10$$

d.



$$4 \times 5 = 20$$

$$\text{So, } 4 \times 5 = 5 \times 4$$



$$5 \times 4 = 20$$

**4 Write the factor pairs and factors of each number**

a. 20

$$1 \times 20 \quad 20 \times 1$$

$$2 \times 10 \quad 10 \times 2$$

$$4 \times 5 \quad 5 \times 4$$

Factors of the number 20 are

1, 2, 4, 5, 10, 20

b. 18

$$1 \times 18 \quad 18 \times 1$$

$$2 \times 9 \quad 9 \times 2$$

$$3 \times 6 \quad 6 \times 3$$

Factors of the number 18 are

1, 2, 3, 6, 9, 18

c. 15

$$1 \times 15 \quad 15 \times 1$$

$$3 \times 5 \quad 5 \times 3$$

Factors of the number 15 are

1, 3, 5, 15

d. 9

$$1 \times 9 \quad 9 \times 1$$

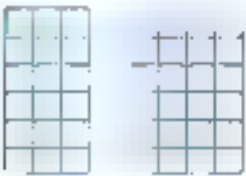
$$3 \times 3$$

Factors of the number 9 are

1, 3, 9

**5 Complete using the Distributive Property**

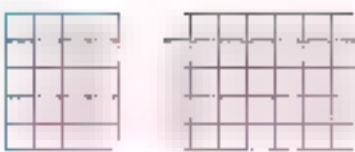
a



$$6 \times 3 + 6 \times 4$$

$$= 18 + 24 = 42$$

b



$$5 \times 4 + 5 \times 7$$

$$= 20 + 35 = 55$$

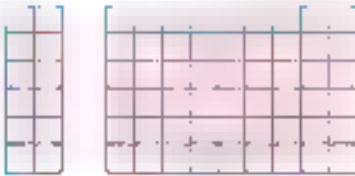
c



$$3 \times 4 + 3 \times 5$$

$$= 12 + 15 = 27$$

d



$$6 \times 2 + 6 \times 9$$

$$= 12 + 54 = 66$$

- 6** Farah went to the store to buy rolls for a big family dinner. She bought 6 bags of rolls. Each one contained 7 rolls.

How many rolls did Farah buy?

$$6 \times 7 = 42 \text{ rolls}$$

- 7** A basket of apples holds 8 apples. How many apples are there in 4 baskets?

$$8 \times 4 = 32 \text{ apples}$$

- 8** Amir packed 5 boxes full of cans. Each box contains 10 cans.

How many cans did Amir pack in all?

$$5 \times 10 = 50 \text{ cans}$$

- 9 Each cat needs 3 fish for lunch.

12

How many cats can we feed if we have 12 fish?

Draw a part-part-whole model to show

4 4 4

your answer

$$12 \div 3 = 4 \text{ cats}$$

- 10 There are 15 oranges that need to be divided equally between 5 baskets.

15

Draw a part-part-whole model to show

(3, 3, 3, 3, 3)

your answer

$$15 \div 5 = 3 \text{ oranges}$$

- 11 Find the missing factors in the triangles, then complete

a



$$7 \times 5 = 35$$

$$5 \times 7 = 35$$

$$35 \div 7 = 5$$

$$35 \div 5 = 7$$




$$6 \times 8 = 48$$


$$8 \times 6 = 48$$


$$48 \div 6 = 8$$

$$48 \div 8 = 6$$

## 12 Complete the tables below

	0	1	2	3	4	5	6	7	8	9	10
0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9	10
2	0	2	4	6	8	10	12	14	16	18	20
3	0	3	6	9	12	15	18	21	24	27	30
4	0	4	8	12	16	20	24	28	32	36	40
5	0	5	10	15	20	25	30	35	40	45	50

	0	1	2	3	4	5	6	7	8	9	10
6	0	6	12	18	24	30	36	42	48	54	60
7	0	7	14	21	28	35	42	49	56	63	70
8	0	8	16	24	32	40	48	56	64	72	80
9	0	9	18	27	36	45	54	63	72	81	90
10	0	10	20	30	40	50	60	70	80	90	100

	0	1	2	3	4	5	6	7	8	9	10
0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9	10

## 13 What is the value of each box.

a	b	c	d	e
9	9	8	10	7
9	9	10	10	7
9	9	10	10	7

$$9 \times 8 = 72 \quad 10 \times 6 = 60 \quad 7 \times 5 = 35 \quad 6 \times 4 = 24$$



Choose the correct answer

1. 5 cm =                  mm                  5 ☐ 50 ☒ 500
2. 6 m =                  cm                  6 ☐ 60 ☒ 600
3. 20 cm =                  mm                  ( 20 ☐ 200 ☒ 2,000 )
4. 20 m =                  cm                  ( 20 ☐ 200 ☒ 2,000 )
5. 700 mm =                  cm                  ( 70 ☐ 700 ☒ 7,000 )
6. 90,000 cm =                  m                  ( 9,000 ☐ 900 ☒ 90 )
7. 1 hour =                  minutes                  60 ☐ 15 ☒ 20
8. Half of an hour =                  minutes                  60 ☐ 15 ☒ 30
9. Quarter of an hour =                  minutes                  60 ☐ 15 ☒ 20
10. One day =                  hours                  24 ☐ 60 ☒ 12
11. 2 liters =                  milliliters                  ( 200 ☐ 2,000 ☒ 20,000 )
12. 10 liters =                  milliliters                  100 ☐ 1,000 ☒ 10,000
13. 50,000 milliliters =                  liters                  5 ☐ 50 ☒ 500
14. The suitable length unit to measure the height of a **tree** is  
 millimeter ☐ centimeter ☒ meter ☐ decimeter
15. The suitable length unit to measure the length of an **insect** is  
 millimeter ☒ centimeter ☐ meter
16. The suitable length unit to measure the length of an **eraser** is  
 millimeter ☒ centimeter ☐ meter
17. Samia started training at 4:00 and finished at 6:00  
 She spent                  hours in training                  ( 2 ☐ 4 ☒ 6 )
18. Ahmed started school at eight o'clock and continued studying for 40 minutes. Ahmed finished his studies at  
 8:00 ☐ 12:00 ☒ 8:40

## Final Revision

1. The triangle has **3** sides. ☐ 3 ☒ 4 ☐ 5
2. The **pentagon** has **5** sides. ☐ quadrilateral ☒ pentagon ☐ hexagon
3. All sides are equal in the **rhombus**. ☐ rectangle ☒ kite ☐ rhombus
4. The **parallelogram** is a quadrilateral that has **only one parallel pair of opposite sides**. ☐ isosceles ☒ rhombus ☐ kite ☐ parallelogram
5. The **rectangle** is a quadrilateral that has **4 right angles**. ☐ parallelogram ☒ rectangle ☐ trapezoid
6. The best unit of capacity to measure the volume of liquid in a spoonful of medicine is **milliliter**. ☐ ml ☒ liter ☐ liter ☐ centimeter
7. The best unit of capacity to measure the volume of water in a swimming pool is **kiloliter**. ☐ milliliter ☒ liter ☐ centimeter
8. **Centimeter** is used to measure **length**. ☐ length ☒ time ☐ capacity
9. **Liter** is used to measure **capacity**. ☐ length ☒ time ☐ capacity
10. **Minute** is used to measure **time**. ☐ length ☒ time ☐ capacity
11. **Milliliter** is used to measure **capacity**. ☐ length ☒ time ☐ capacity
12. **Meter** is used to measure **length**. ☐ length ☒ time ☐ capacity

## Second: Complete the following

1.  $6\text{ cm} = 60\text{ mm}$
2.  $10\text{ cm} = 100\text{ mm}$
3.  $4\text{ m} = 400\text{ cm}$
4.  $50\text{ m} = 5,000\text{ cm}$
5.  $900\text{ mm} = 90\text{ cm}$
6.  $4,000\text{ cm} = 40\text{ m}$
7.  $60\text{ minutes} = 1\text{ hour(s)}$
8.  $\text{One day} = 24\text{ hours}$

$$7 \text{ liters} = 7\,000 \text{ milliliters}$$

$$10 \text{ liters} = 10\,000 \text{ milliliters}$$

$$90,000 \text{ milliliters} = 90 \text{ liters}$$

Adam went to school at 8:00 am and left school for home at 2:00 pm.

So, Adam spent 4 hours in school.

The quadrilateral has 4 sides.

The hexagon has 6 vertices.

In the square, all sides are equal in length.

The kite is a quadrilateral that has two pairs of adjacent sides which are equal in length.

The best unit to measure the volume of liquid in a cup full of coffee is milliliter.

The best unit to measure your height is centimeter.

Millimeter is used to measure capacity.

An hour is used to measure time.

**-Third:-** Answer the following.

1. Look at the images, then figure out the next and previous images in the same pattern:

a.





## Final Revision



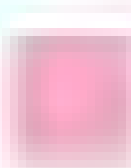
1



4



9



10



25

c



1



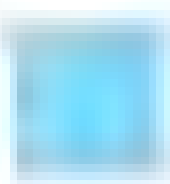
2



4



8



16

## 2 Draw the hands and write the time

a



3 o'clock

It's 3 o'clock.

b



3:30

It's half past 3

c



3:15

It's 15 past 3

d



3:40

It's 20 to 4

e



4:20

It's 20 past 4

f



4:15

It's 15 to 4

3 Write the number of sides and the name of each shape.

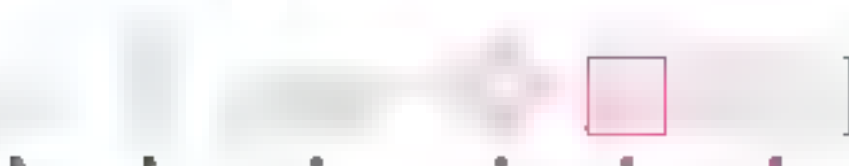


Number of Sides	3	4	5
Name	Triangle	Quadrilateral	Pentagon



Number of Sides	6	7	8
Name	Hexagon	Heptagon	Octagon

4 Match each quadrilateral to its name.



☐ Kite
 ☐ Parallelogram
 ☐ Trapezoid
 ☐ Rectangle
 ☐ Rhombus
 ☐ Square

# Final Revision

- 5 Use a ruler to measure the length of each side, then find the perimeter of each of the following shapes.



a Perimeter = 12 cm

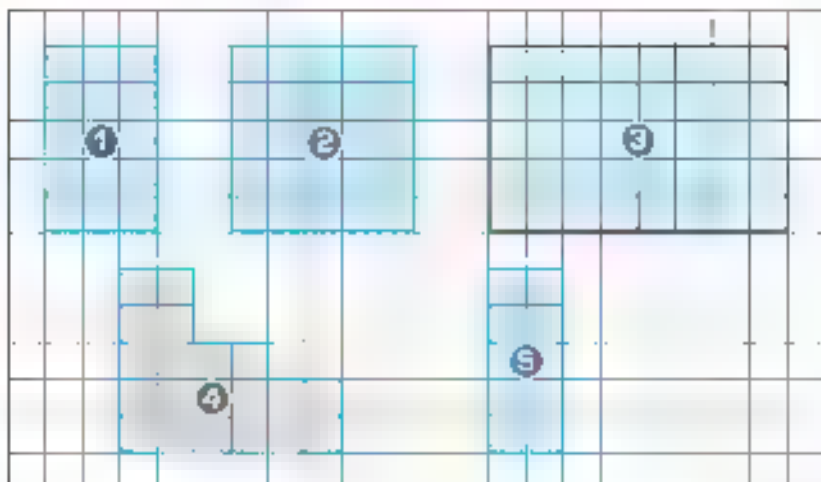


b Perimeter = 10 cm



c Perimeter = 10 cm

- 6 Look at the following grid, then complete the table



Shape	Perimeter	Area
1	16	15
2	20	25
3	26	40
4	22	20
5	14	10

# Model Exams

1

**First:** Choose the correct answer:

- a Twenty five thousand, twenty five (in standard form)  
 (25,025 or 25,250 or 25,205 )
- b  $4 + 4 + 4 + 4 + 4 =$   
 $4 \times 4$  or  $5 + 4$  or  $5 \times 4$
- c 50 cm = \_\_\_\_\_ mm  
 50 or 500 or 5,000
- d The **smallest** 5-digit number is  
 99,999 or 10,234 or 10,000 )
- e  $8 \div 4 =$   
 (32) or 2 or 12 )

**Second:** Complete the following

- a  $6 \times 8 =$  **8**  $\times 6$
- b The **place value** of the digit 0 in 20,158 is **Thousands**
- c  $45,000 \div 45 =$  **45,045**
- d The time shown on the opposite clock is **20 past 9**
- e The quadrilateral has **4** sides



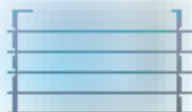
**Third:** Answer the following:

- a Arrange the following numbers in an **ascending** order

42,402    42,204    42,024    42,420    42,240

• **42,024    42,204    42,240    42,402    42,420**

- b Find the area and the perimeter of each of the following shapes



- Area = **40** square units    • Area = **35** square units  
 Perimeter **26** length units    • Perimeter **21** length units
- Mazen bought a shirt for **245** LE and bought a T shirt for **188** LE  
 How much money did Mazen spend ?  **$245 + 188 = 433$  LE**

**-First:-**

Choose the correct answer:

- a.  $16\text{ m} =$  \_\_\_\_\_ cm 160 ☐ 1,600 ☒ 16,000 ☐
- b.  $5 + 100,000 + 100 + 5,000 =$  5,154 ☐ 105,405 ☒ 454,500 ☐
- c.  $6 + 6 + 6 + 6 + 6 = 3 \times$  5 ☐ 6 ☒ 10 ☐
- d. The value of the digit 3 in 15321 is ( 3,000 ☒ 300 ☐ 30 ☐ )
- e.  $8 \times$  \_\_\_\_\_  $= 4 \times 6$  ( 4 ☐ 24 ☒ 3 ☐ )

**Second:**

Complete the following

- a. 900 Thousands = **90,000** Tens
- b. The number that comes just **before** 20,000 is **19,999**
- c. **20**  $\times 10 = 4 \times 5 \times 10$
- d. In the **square**, all sides are **equal** in length
- e. Five hundred ninety four thousand, four hundred fourteen  
(in standard form) is **594,414**

**-Third:-**

Answer the following:

- a. Find the result
- $4,125 + 2,925 =$  **7,050** •  $8 \times 9 =$  **72**
- $7,254 - 835 =$  **6,419** •  $45 \div 9 =$  **5**
- b. Write the time shown on the clock



5:40  
20 to 6



5:15  
Quarter  
past 5

- c. If each chair has 4 legs, then how many legs are there in 8 chairs?  
 **$8 \times 4 = 32$  Legs**

## 3

**First:** Choose the correct answer

- a  $8 \times 3 =$   $8 + 8$  ☐  $4 + 6$  ☐  $4 \times 6$
- b 50 Thousands + 50 Hundreds = 50,500 ☐ 59,000 ☐ 505,000
- c 10 Thousands = Hundreds 10,000 ☐ 1,000 ☐ 100
- d The best unit to measure the length of an orange is millimeter ☐ centimeter ☒ meter
- e 1,000 mm = cm 100 ☐ 10 ☐ 1

**Second:** Complete the following

- a  $9 \times 12 = (9 \times 10) + (9 \times 2)$   $90 + 18$  108 (Using Distributive Property)
- b The triangle has 3 sides
- c The place value of the digit 9 in 8952 is Hundreds
- d  $8 \times 1 = 8$
- e The smallest 5-different-digit number is 10,234

**Third:** Answer the following

- a Complete using  $<$ ,  $=$  or  $>$ .

$75,258 < 75,528$

$6 \times 6 = 4 \times 9$

$80 \text{ Thousands} > 800 \text{ Tens}$

$28 \div 4 < 32 \div 4$

- b Hana had 1,250 LE she bought some clothes for 625 LE

How much money is left with Hana?

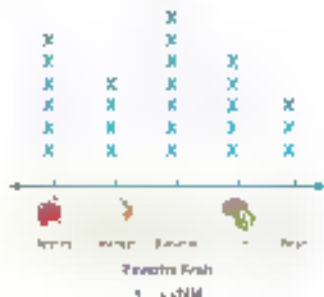
$1,250 - 625 = 625 \text{ LE}$

- c The opposite line plot shows the favorite fruit for 25 children
- d Which fruit is liked the most?

Bananas

Which fruit is liked the least?

Pears



# 4

## -First:- Choose the correct answer:

- a. 1 Hour = \_\_\_\_\_ minutes ( 15    ☐ 30    ☒ 60 )
- b. 8 X \_\_\_\_\_ = 40,000 ( 50    ☐ 500    ☒ 5,000 )
- c.  $400 + 0 + 0 + 5 =$  \_\_\_\_\_ 405    ☐ 4,005    ☒ 400,005
- d. The value of the digit 6 in 256,823 is \_\_\_\_\_ ( 600    ☒ 6,000    ☐ 60,000 )
- e.  $63 \div 7 =$  \_\_\_\_\_ ( 7    ☐ 8    ☒ 9 )

## Second: Complete the following

- a.  $4 + 4 + 4 + 4 + 4 + 4 + 4 =$  **7** x **4**
- b. 87201 = **1** One + **2** Hundreds + **87** Thousands + **0** Tens
- c. The quadrilateral has **4** sides
- d.  $5 \times 14 = 5 \times 10 + 5 \times$  **4** = **50** + **20** = **70**
- e. The number that comes just before 15 200 is **15 199**

## -Third:- Answer the following:

- a. Arrange the following numbers in a descending order  
1,000    999    10,000    9999    1,100

- b. **10,000**    **9,999**    **1,100**    **1,000**    **999**

- c. The teacher has **36** crayons to share equally between **4** students. What is the share of each student?

**36**

Complete the opposite part-part-whole model

$$36 \div 4 = 9 \text{ Crayons}$$

**9    9    9    9**

- d. Look at each array, then complete



- a. **4** rows of **4**  
 **$4 \times 4 = 16$**



- b. **3** rows of **6**  
 **$3 \times 6 = 18$**

## 5

**First:** Choose the correct answer

a  $50 + 3,000 + 800 + 700,000 =$

b  $5 \times 3 + 5 \times 4 =$

c One day = \_\_\_\_\_ hours

d \_\_\_\_\_  $\div 6 = 7$

e The **greatest** 5-digit number is

f  $3,050 + 7039 + 70,395 =$

g  $(5 \times 7) + (5 \times 12) + (10 \times 7)$

h  $60 + 24 + 12$

i  $(42) + 7 + 6 =$

j  $(90,000) + 99,000 + 99,999 =$

**Second:** Complete the following

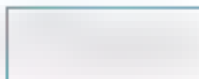
a  $9 \times 6 = 54$

b The **place value** of the digit 6 in 621 005 is **Hundreds Thousands**

c  $45\,045 = 45 + 45\,000$

d The opposite figure is called **rectangle**

e  $(8 \times 10) + (8 \times 7) = 8 \times 17$

**Third:** Answer the followinga Use the **number line** strategy to add:

b  $756 + 123 = 879$

c Use the **Place Value Chart** to subtract  $8,542 - 239 = 7,303$ 

Thousands	Hundreds	Tens	Ones
7	3	0	3

d  $1\,239 + 7,303 = 8,542$

e Complete the following pattern



**First:** Choose the correct answer:

- a  $20 \text{ Thousands} + 2 \text{ Tens} =$   $22,000$  ☐  $20,020$  ☐  $20,002$
- b  $9 \times 7 = (7 \times 10)$   $(9$  ☐  $10$  ☒  $7)$
- c  $20 \text{ liters} =$   $\text{milliliters}$   $20,000$  ☐  $2,000$  ☐  $200$
- d Two hundred thousand, twenty (in standard form).  
 $220,000$  ☐  $202,000$  ☒  $200,020$
- e  $4 + 4 + 4 + 4 = 2 \times$   $(4$  ☒  $8)$  ☐  $16$

**Second:** Complete the following

- a The **smallest** number that can be formed from the digits  $5, 8, 0, 2$  and  $6$  is  **$20,568$**
- b The **place value** of the digit  $4$  in  $245,630$  is **Ten Thousands**
- c  $6 \times$   **$200$**   $= 1,200$
- d The opposite figure is called **hexagon**
- e  $3 \times 50 = 15 \times$   **$10$**

**Third:** Answer the following:

- a Arrange the following numbers in a **1** order

$6,584$     $8,654$     $4,568$    ,  $6,485$    ,  $5,684$

- b  **$8\ 654$     $6\ 584$     $6\ 485$     $5\ 684$     $4,568$**

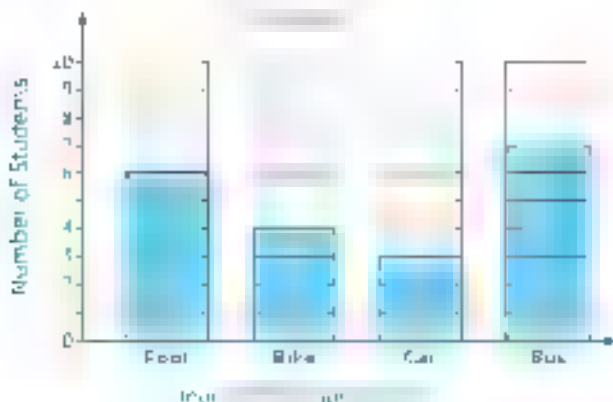
- c Sama has  **$756$  LE** and Yara has  **$318$  LE**

How much money do they have a together?

$$756 + 318 = 1,074 \text{ LE}$$

- c. The following table shows the methods used by 20 students to reach school. Use it to complete the bar graph below.

Method	On foot	By bike	By car	By bus
Number of Students	6	4	3	7



7

**First:** Choose the correct answer.

- a. The number \_\_\_\_\_ comes just **after** 20,000  
 20,999    ☐ 22,000    ☐ 21,000
- b. 3,000 milliliters = \_\_\_\_\_ liters    ☐ 3    ☐ 30    ☐ 300
- c.  $9 \div 9 =$  \_\_\_\_\_  $\times 6$     ☐ 2    ☐ 3    ☐ 9
- d. The value of the digit 1 in 10,234 is \_\_\_\_\_  
 10    ☐ 1,000    ☐ 10,000
- e.  $9 \times 5 = (\quad \times 10) \div 5$     ☐ 9    ☐ 5    ☐ 10

**Second:** Complete the following.

- a. 500 Tens = **5** Thousands
- b. The number that comes just **after** 250,999 is **251,000**
- c.  $6 \times 4 =$  **6** + **6** + **6** + **6**

## Final Revision

Q 30 27 24, 21, 18, 15, 12

The time shown on the opposite clock is 5 past 8

7

**Third:** Answer the following:

a. Find the result

$$8\,997 + 903 = 10\,000$$

$$7 \times 4 = 28$$

$$6\,258 - 128 = 6\,130$$

$$21 \div 3 = 7$$

b. Write the factor pairs and factors of each number

$$\begin{array}{cc} & 16 \\ 1 \times 16 & 16 \times 1 \\ 2 \times 8 & 8 \times 2 \\ 4 \times 4 & \end{array}$$

The factors of 16 are

1, 2, 4, 8, 16

$$\begin{array}{cc} & 8 \\ 1 \times 8 & 8 \times 1 \\ 2 \times 4 & 4 \times 2 \end{array}$$

The factors of 8 are

1, 2, 4, 8

8

**First:** Choose the correct answer

a.  $28 \div 7 = 7$  ( )  $7$  ( )  $28$  ( )  $(4)$  ( )

c. The smallest number that can be formed from the digits

7, 3, 8, 0 and 5 is

87530 ( ) 30,528 ( ) 35,780 ( )

The pentagon has \_\_\_\_\_ sides

4 ( ) 5 ( ) 6 ( )

d. Liter is used to measure the \_\_\_\_\_

time ( ) length ( ) capacity ( )

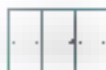
e. The smallest 6-digit number is

100 000 ( ) 999 999 ( ) 102 345 ( )

**Second:** Complete the following

$$(9 \times 10) \div 9 = 9 \times 9$$

a. The area of the opposite shape = 6 square units



c. 204,020 (in word form) Two hundred four thousand, twenty

$$5 \times 0 = 0$$

e. 85,201 = 8 Hundreds + 5 Tens + 2 Ones + 1 Tens + 0 Hundreds

**Third:** Answer the followinga Complete using  $<$ ,  $=$ ,  $>$  :

•  $50.003 > 9.875$

•  $7 \times 7 > 6 \times 8$

•  $80 + 800,000 < 880,000$

•  $36 \div 4 = 45 \div 5$

c Eyad has 542 LE and Fares has 325 LE

Find the difference between their money.

$$542 - 325 = 217 \text{ LE}$$

c Draw the analog clock hands and write the numbers of the digital clock



It's 1:50 past 1



It's 20 to 3

9

**First:** Choose the correct answer

a  $500,500 = 500 +$

$500$  ☐  $500,500$  ☒  $500,000$

b Centimeter is used to measure the

time ☐ length ☒ capacity

c  $2,000 + 0 + 3 =$

$2,003$  ☐  $200,003$  ☒  $20,003$

d  $5 \times 80 = 4 \times$

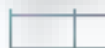
$10$  ☐  $100$  ☒  $1,000$

e  $6 \times = 48$

$(6)$  ☒  $7$  ☐  $(8)$

**Second:** Complete the following

a The perimeter of the opposite shape = 10 units



b  $35 \div 5 = 7$

c The number 32 010 comes just after 32,009

d 85 Thousands + 8 hundreds + 2 Ones = 85,802 (in standard form)

e  $3 + 3 + 3 + 3 + 3 = 5 \times 3$

## Final Revision

### -Third- Answer the following:

- a Arrange the following numbers in a **LL** and **TL** order

55,000    500,000    525,000    5,000    50,000

• **505 000    500,000    55 000    50 000    5 000**

- a The total number of books in a library is **250**.

**120** of which are borrowed and **30** are missing. How many books are in the library now?

$$120 + 30 = 150$$

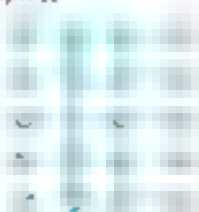
$$250 - 150 = 100$$

Look at each array. Then complete



**3** rows of **6**

$$3 \times 6 = 18$$



**4** columns of **5**

$$4 \times 5 = 20$$

**10**

### -First- Choose the correct answer:

- a  $50 \times 20 =$

100

☒ 1 000

☐ 10,000

- b Minute is used to measure the

length

☐ capacity

☐ time

- c  $3 \times 10 + 3 \times 5 =$

$3 \times 15$

☒  $6 \times 15$

☐  $3 \times 5$

- d  $100,100 = 100 +$

100

☒ 100,000

☐ 10,000

- e The **place value** of the digit 8 is 28 120 is

Tens

☒ Hundreds

☒ Thousands

**Second:** Complete the following

- a. 20 Thousands + 20 Hundreds =  $20,000 + 2,000 = 22,000$
- b. The number that comes next after 25 009 is 25,010
- c.  $8 + 8 + 8 + 8 + 8 = 4 \times 10$
- d. XU XXU XXXU XXXXU XXXXXU (in the same pattern)
- e. The greatest 5-digit number formed from the digits 5, 3 and 7 is 77,753

**Third:** Answer the following:

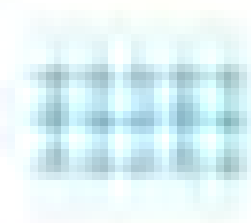
- a. Use the \_\_\_\_\_ to add  $456 + 628$ .

$$400 + 50 + 6$$

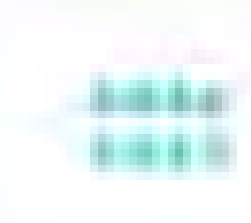
$$600 + 20 + 8$$

$$1,000 + 70 + 14 = 1,084$$

- b. Create an array



3 rows of 5



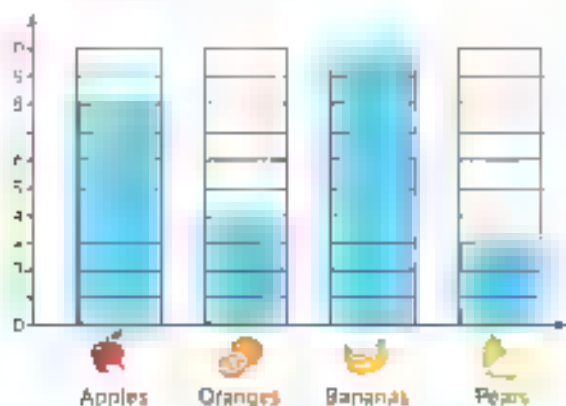
4 columns of 2

## Final Revision

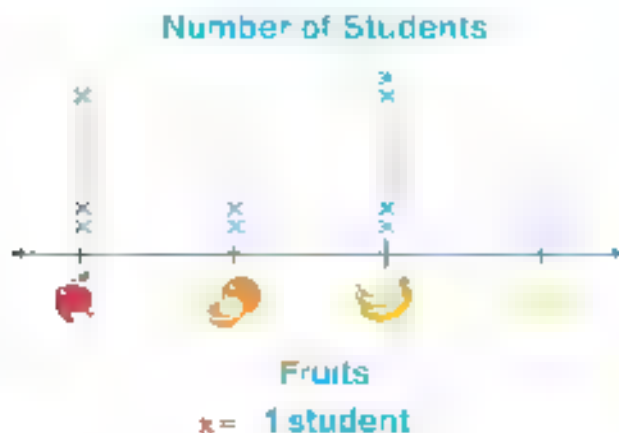
- The following table shows the **Favorite Fruit** for 25 students.
- Complete the following table

Favorite Fruit	Apples 🍏	Oranges 🍊	Bananas 🍌	Pears 🍐
Tallies				
Number of Students	8	4	10	3

- Complete the following bar graph



- Complete the following line plot



# Guide Answers

## Exercises on Chapter 1

1

### Patterns

1.  $0 \rightarrow 1$      $0 \rightarrow 1$      $0 \rightarrow 1$   
 $0 \rightarrow 1$      $0 \rightarrow 1$      $0 \rightarrow 1$
2.  $0 \rightarrow 1$      $0 \rightarrow 1$      $0 \rightarrow 1$   
 $0 \rightarrow 1$      $0 \rightarrow 1$      $0 \rightarrow 1$
3.  $0 \rightarrow 1$      $0 \rightarrow 1$      $0 \rightarrow 1$   
 $0 \rightarrow 1$      $0 \rightarrow 1$      $0 \rightarrow 1$
4.  $0 \rightarrow 1$      $0 \rightarrow 1$      $0 \rightarrow 1$   
 $0 \rightarrow 1$      $0 \rightarrow 1$      $0 \rightarrow 1$

5.  $0 \rightarrow 1$      $0 \rightarrow 1$      $0 \rightarrow 1$   
 $0 \rightarrow 1$      $0 \rightarrow 1$      $0 \rightarrow 1$

6.  $0 \rightarrow 1$      $0 \rightarrow 1$      $0 \rightarrow 1$   
 $0 \rightarrow 1$      $0 \rightarrow 1$      $0 \rightarrow 1$

7.  $0 \rightarrow 1$      $0 \rightarrow 1$      $0 \rightarrow 1$   
 $0 \rightarrow 1$      $0 \rightarrow 1$      $0 \rightarrow 1$

8.  $0 \rightarrow 1$      $0 \rightarrow 1$      $0 \rightarrow 1$   
 $0 \rightarrow 1$      $0 \rightarrow 1$      $0 \rightarrow 1$

9.  $0 \rightarrow 1$      $0 \rightarrow 1$      $0 \rightarrow 1$   
 $0 \rightarrow 1$      $0 \rightarrow 1$      $0 \rightarrow 1$

10.  $0 \rightarrow 1$      $0 \rightarrow 1$      $0 \rightarrow 1$   
 $0 \rightarrow 1$      $0 \rightarrow 1$      $0 \rightarrow 1$
11.  $0 \rightarrow 1$      $0 \rightarrow 1$      $0 \rightarrow 1$   
 $0 \rightarrow 1$      $0 \rightarrow 1$      $0 \rightarrow 1$
12.  $0 \rightarrow 1$      $0 \rightarrow 1$      $0 \rightarrow 1$   
 $0 \rightarrow 1$      $0 \rightarrow 1$      $0 \rightarrow 1$
13.  $0 \rightarrow 1$      $0 \rightarrow 1$      $0 \rightarrow 1$   
 $0 \rightarrow 1$      $0 \rightarrow 1$      $0 \rightarrow 1$
14.  $0 \rightarrow 1$      $0 \rightarrow 1$      $0 \rightarrow 1$   
 $0 \rightarrow 1$      $0 \rightarrow 1$      $0 \rightarrow 1$
15.  $0 \rightarrow 1$      $0 \rightarrow 1$      $0 \rightarrow 1$   
 $0 \rightarrow 1$      $0 \rightarrow 1$      $0 \rightarrow 1$
16.  $0 \rightarrow 1$      $0 \rightarrow 1$      $0 \rightarrow 1$   
 $0 \rightarrow 1$      $0 \rightarrow 1$      $0 \rightarrow 1$

### Accumulative Assessment 1

1.  $0 \rightarrow 1$      $0 \rightarrow 1$      $0 \rightarrow 1$   
 $0 \rightarrow 1$      $0 \rightarrow 1$      $0 \rightarrow 1$
2.  $0 \rightarrow 1$      $0 \rightarrow 1$      $0 \rightarrow 1$   
 $0 \rightarrow 1$      $0 \rightarrow 1$      $0 \rightarrow 1$
3.  $0 \rightarrow 1$      $0 \rightarrow 1$      $0 \rightarrow 1$   
 $0 \rightarrow 1$      $0 \rightarrow 1$      $0 \rightarrow 1$
4.  $0 \rightarrow 1$      $0 \rightarrow 1$      $0 \rightarrow 1$   
 $0 \rightarrow 1$      $0 \rightarrow 1$      $0 \rightarrow 1$

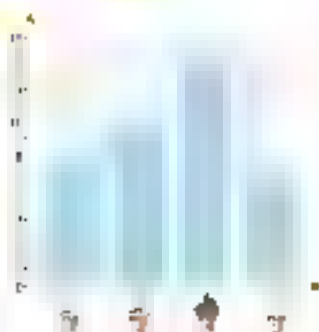
2

### More of Bar Graphs

Bar Graph	1	2	3	4
Tally Marks				
Number	4	4	4	4

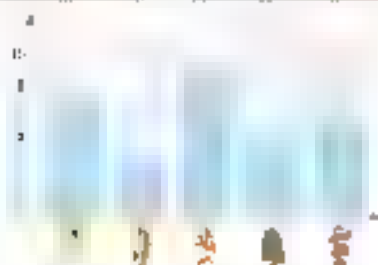


**Grade Answer:**




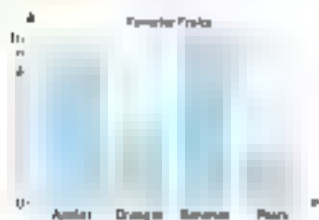
y

Fish	Age	Sex	Length (mm)	Weight (g)	Stomach contents
Tolly Murex	III	I	115	14	II
Burmese			120	15	



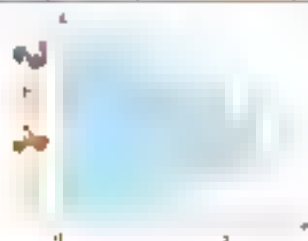
3

Favorite Fruit	Tallies	Number of Children
Apples 		4
Oranges 		2
Bananas		5
Pears		0



1

Type of Error				
Number of Errors				

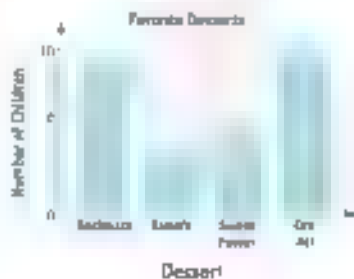


## Accountability Assessment [2]

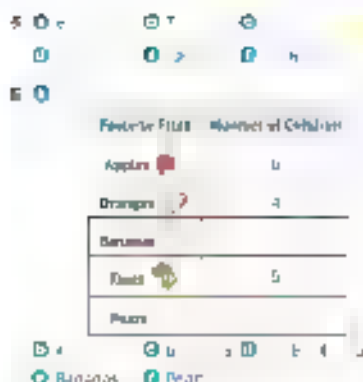
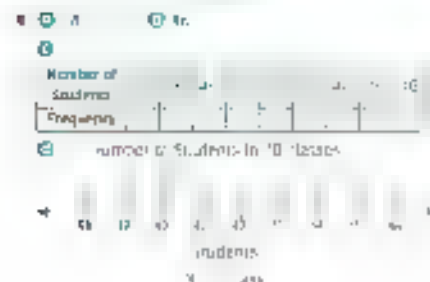
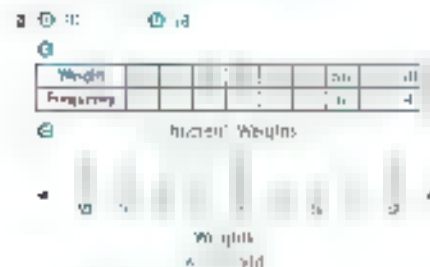
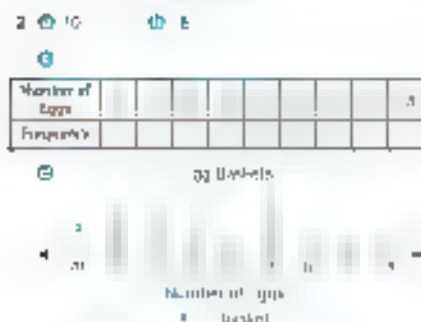
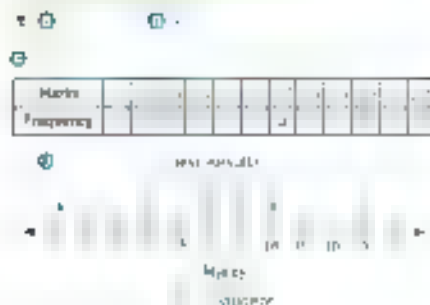


3

Favorite Dessert	Sellers	Number of Customers
Baklava 	1/2 1/3	11
Kumbara 	1/2	9
Sweet Fava 	1/2	10
Donut 	1/2 1/3	11



### 3 Line Plot



### Accumulative Assessment [3]

- 1 ☐ A ☐ B ☐ C ☐ D ☐ E
- 2 ☐ A ☐ B ☐ C ☐ D ☐ E
- 3 ☐ A ☐ B ☐ C ☐ D ☐ E

### 4-6

### Measuring Lengths in (Centimeter, Meter, and Millimeter)

- 1 ☐ A ☐ B ☐ C ☐ D
- 2 ☐ A ☐ B ☐ C ☐ D
- 3 ☐ A ☐ B ☐ C ☐ D
- 4 ☐ A ☐ B ☐ C ☐ D

## Grade Answers

- [illegible]

- 300 calls + 75 faxes = 375 calls  
 200 cm = 20 cm = 200 cm  
 :0.1m = 207 cm  
 445 m = 445 m

1. 1 mm 2 m 1 mm  
 2. 10 mm 4 m 10 mm  
 3. 5 mm 10 mm  
 4. 10 mm 10 mm

-                              

- 

- 





### Accumulative Assessment 4

1.  $3x^2 + 4x - 5$   $4x^2 - 3x + 2$
2.  $2x^2 + 5x - 3$   $4x^2 + 3x - 2$
3.  $5x^2 + 7x - 4$   $3x^2 + 2x - 1$
4.  $6x^2 + 8x - 7$   $2x^2 + 1x - 0$
5.  $7x^2 + 9x - 8$   $1x^2 + 0x - 0$
6.  $8x^2 + 10x - 9$   $0x^2 + 0x - 0$
7.  $9x^2 + 11x - 10$   $0x^2 + 0x - 0$
8.  $10x^2 + 12x - 11$   $0x^2 + 0x - 0$
9.  $11x^2 + 13x - 12$   $0x^2 + 0x - 0$
10.  $12x^2 + 14x - 13$   $0x^2 + 0x - 0$
11.  $13x^2 + 15x - 14$   $0x^2 + 0x - 0$
12.  $14x^2 + 16x - 15$   $0x^2 + 0x - 0$
13.  $15x^2 + 17x - 16$   $0x^2 + 0x - 0$
14.  $16x^2 + 18x - 17$   $0x^2 + 0x - 0$
15.  $17x^2 + 19x - 18$   $0x^2 + 0x - 0$
16.  $18x^2 + 20x - 19$   $0x^2 + 0x - 0$
17.  $19x^2 + 21x - 20$   $0x^2 + 0x - 0$
18.  $20x^2 + 22x - 21$   $0x^2 + 0x - 0$
19.  $21x^2 + 23x - 22$   $0x^2 + 0x - 0$
20.  $22x^2 + 24x - 23$   $0x^2 + 0x - 0$
21.  $23x^2 + 25x - 24$   $0x^2 + 0x - 0$
22.  $24x^2 + 26x - 25$   $0x^2 + 0x - 0$
23.  $25x^2 + 27x - 26$   $0x^2 + 0x - 0$
24.  $26x^2 + 28x - 27$   $0x^2 + 0x - 0$
25.  $27x^2 + 29x - 28$   $0x^2 + 0x - 0$
26.  $28x^2 + 30x - 29$   $0x^2 + 0x - 0$
27.  $29x^2 + 31x - 30$   $0x^2 + 0x - 0$
28.  $30x^2 + 32x - 31$   $0x^2 + 0x - 0$
29.  $31x^2 + 33x - 32$   $0x^2 + 0x - 0$
30.  $32x^2 + 34x - 33$   $0x^2 + 0x - 0$
31.  $33x^2 + 35x - 34$   $0x^2 + 0x - 0$
32.  $34x^2 + 36x - 35$   $0x^2 + 0x - 0$
33.  $35x^2 + 37x - 36$   $0x^2 + 0x - 0$
34.  $36x^2 + 38x - 37$   $0x^2 + 0x - 0$
35.  $37x^2 + 39x - 38$   $0x^2 + 0x - 0$
36.  $38x^2 + 40x - 39$   $0x^2 + 0x - 0$
37.  $39x^2 + 41x - 40$   $0x^2 + 0x - 0$
38.  $40x^2 + 42x - 41$   $0x^2 + 0x - 0$
39.  $41x^2 + 43x - 42$   $0x^2 + 0x - 0$
40.  $42x^2 + 44x - 43$   $0x^2 + 0x - 0$
41.  $43x^2 + 45x - 44$   $0x^2 + 0x - 0$
42.  $44x^2 + 46x - 45$   $0x^2 + 0x - 0$
43.  $45x^2 + 47x - 46$   $0x^2 + 0x - 0$
44.  $46x^2 + 48x - 47$   $0x^2 + 0x - 0$
45.  $47x^2 + 49x - 48$   $0x^2 + 0x - 0$
46.  $48x^2 + 50x - 49$   $0x^2 + 0x - 0$
47.  $49x^2 + 51x - 50$   $0x^2 + 0x - 0$
48.  $50x^2 + 52x - 51$   $0x^2 + 0x - 0$
49.  $51x^2 + 53x - 52$   $0x^2 + 0x - 0$
50.  $52x^2 + 54x - 53$   $0x^2 + 0x - 0$
51.  $53x^2 + 55x - 54$   $0x^2 + 0x - 0$
52.  $54x^2 + 56x - 55$   $0x^2 + 0x - 0$
53.  $55x^2 + 57x - 56$   $0x^2 + 0x - 0$
54.  $56x^2 + 58x - 57$   $0x^2 + 0x - 0$
55.  $57x^2 + 59x - 58$   $0x^2 + 0x - 0$
56.  $58x^2 + 60x - 59$   $0x^2 + 0x - 0$
57.  $59x^2 + 61x - 60$   $0x^2 + 0x - 0$
58.  $60x^2 + 62x - 61$   $0x^2 + 0x - 0$
59.  $61x^2 + 63x - 62$   $0x^2 + 0x - 0$
60.  $62x^2 + 64x - 63$   $0x^2 + 0x - 0$
61.  $63x^2 + 65x - 64$   $0x^2 + 0x - 0$
62.  $64x^2 + 66x - 65$   $0x^2 + 0x - 0$
63.  $65x^2 + 67x - 66$   $0x^2 + 0x - 0$
64.  $66x^2 + 68x - 67$   $0x^2 + 0x - 0$
65.  $67x^2 + 69x - 68$   $0x^2 + 0x - 0$
66.  $68x^2 + 70x - 69$   $0x^2 + 0x - 0$
67.  $69x^2 + 71x - 70$   $0x^2 + 0x - 0$
68.  $70x^2 + 72x - 71$   $0x^2 + 0x - 0$
69.  $71x^2 + 73x - 72$   $0x^2 + 0x - 0$
70.  $72x^2 + 74x - 73$   $0x^2 + 0x - 0$
71.  $73x^2 + 75x - 74$   $0x^2 + 0x - 0$
72.  $74x^2 + 76x - 75$   $0x^2 + 0x - 0$
73.  $75x^2 + 77x - 76$   $0x^2 + 0x - 0$
74.  $76x^2 + 78x - 77$   $0x^2 + 0x - 0$
75.  $77x^2 + 79x - 78$   $0x^2 + 0x - 0$
76.  $78x^2 + 80x - 79$   $0x^2 + 0x - 0$
77.  $79x^2 + 81x - 80$   $0x^2 + 0x - 0$
78.  $80x^2 + 82x - 81$   $0x^2 + 0x - 0$
79.  $81x^2 + 83x - 82$   $0x^2 + 0x - 0$
80.  $82x^2 + 84x - 83$   $0x^2 + 0x - 0$
81.  $83x^2 + 85x - 84$   $0x^2 + 0x - 0$
82.  $84x^2 + 86x - 85$   $0x^2 + 0x - 0$
83.  $85x^2 + 87x - 86$   $0x^2 + 0x - 0$
84.  $86x^2 + 88x - 87$   $0x^2 + 0x - 0$
85.  $87x^2 + 89x - 88$   $0x^2 + 0x - 0$
86.  $88x^2 + 90x - 89$   $0x^2 + 0x - 0$
87.  $89x^2 + 91x - 90$   $0x^2 + 0x - 0$
88.  $90x^2 + 92x - 91$   $0x^2 + 0x - 0$
89.  $91x^2 + 93x - 92$   $0x^2 + 0x - 0$
90.  $92x^2 + 94x - 93$   $0x^2 + 0x - 0$
91.  $93x^2 + 95x - 94$   $0x^2 + 0x - 0$
92.  $94x^2 + 96x - 95$   $0x^2 + 0x - 0$
93.  $95x^2 + 97x - 96$   $0x^2 + 0x - 0$
94.  $96x^2 + 98x - 97$   $0x^$

- 272
- PO4**
- Math Exam 3 Final Exam

## Exercises on Chapter 2

## 14

### Thousands Ten Thousands, and Hundred Thousands - Numbers in Different Forms

## First

- [illegible]

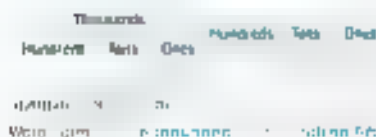
# Grade Answers

4. **Iteration: 550**

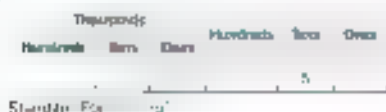
Word Form: five hundred fifty thousand

Standard Form: 550,000

5.



6.



7.



8.



9.



10.



11.



12.



13. **100**      **10**      **1**      **1**

**100**      **10**      **1**      **1**

14. **100**      **10**      **1**      **1**

**100**      **10**      **1**      **1**

15. **100**      **10**      **1**      **1**

**100**      **10**      **1**      **1**

**100**      **10**      **1**      **1**

**100**      **10**      **1**      **1**

**100**      **10**      **1**      **1**

**100**      **10**      **1**      **1**

**100**      **10**      **1**      **1**

**100**      **10**      **1**      **1**

**100**      **10**      **1**      **1**

## Second

16.

Number	Place Value	Value
1. 134,567	Hundred Thousands	134,000
2. 7,235	Ten Thousands	70,000
3. 1,000	One Thousand	1,000
4. 100	One Hundred	100
5. 100,000	One Hundred Thousand	100,000
6. 10,000	Ten Thousand	10,000
7. 1,000	One Thousand	1,000
8. 100	One Hundred	100
9. 10	One Ten	10
10. 1	One One	1
11. 100,000	Hundred Thousands	100,000
12. 10,000	Ten Thousands	10,000
13. 1,000	One Thousand	1,000

14. **100**      **10**      **1**      **1**

**100**      **10**      **1**      **1**

**100**      **10**      **1**      **1**

## Grade Answers

- ☐ 50    ☐ 100    ☐ 1,000    ☐ 1,000  
☐ 5,000    ☐ 50,000    ☐ 5,000    ☐ 50,000  
☐ 7    ☐ 700    ☐ 50    ☐ 5,000  
☐ 90    ☐ 500    ☐ 9,000    ☐

4.  $70,000 + 5,000 + 400 = 70 + 5$   
☐ 500,000 + 50,000 + 1,000    200 + 30 + 6  
☐ 400    100    400    1    1  
☐ 500,000    500    800  
☐ 50,000    5    ☐ 500,000    400  
☐ 500,000    500    ☐ 500,000    500

5. ☐ 4<sup>1</sup>    ☐ 4<sup>-4</sup>    ☐ 4<sup>1</sup>    4<sup>1</sup>  
☐ 7.5 E 920    ☐ 500 E 0.2    ☐ 7.5 E 920  
☐ 750,000.0

6. ☐ 4    ☐ 4    ☐ 4  
☐ 5%    ☐ 100%    ☐ 100%  
☐ 5000    ☐ 5000    ☐ 2000

7. ☐ 4<sup>1</sup>    ☐ 4<sup>1</sup>    ☐ 4<sup>1</sup>  
☐ 5,000    ☐ 50,000    ☐ 500,000  
☐ 4    4    4

There is

- [illegible]

- [illegible]

Accumulative Assessment 5

- | 1 | 4.1e1 | 45    | 41    |
|---|-------|-------|-------|
| 2 | 0.7e0 | 4.2e0 |       |
| 3 | 1.7e0 | 4.0e0 |       |
| 4 | 1.5e0 | 2.5e0 | 2.5e0 |
| 5 | 2.3e0 |       |       |
| 6 | 4.5e0 | 4.5e0 | 4.5e0 |

## 5

**Ausgangspunkt**

- ④ Difference of ages is 5  
 $x - y = 5$   
 Number of children is 10  
 $x + y = 10$   
 Difference of children is 2  
 $x - y = 2$   
 Number of new is 8  
 $x + y = 8$   
 Number of children is  
 $x + y = 10$   
 $x - y = 2$

- ① Number of rows is 4

② ③ ④ ⑤ ⑥

Number of columns is 6

① ② ③ ④ ⑤ ⑥

① ② ③

- ① Number of rows is

② ③ ④

Number of columns is

① ②

2

- ①

② ③ ④ ⑤ ⑥

① rows of

- ②

③ ④ ⑤ ⑥

① rows of

- ②

③ ④ ⑤ ⑥

① rows of

- ②

③ ④ ⑤ ⑥

① rows of

- ②

③ ④ ⑤ ⑥

- ③



① rows of

- ②



① columns of

- ②



① columns of

- ②



① columns of

- ②



2

- ① ② ③ ④ ⑤ ⑥

① ② ③ ④ ⑤ ⑥

① ② ③ ④ ⑤ ⑥

① ② ③ ④ ⑤ ⑥

① ② ③ ④ ⑤ ⑥

①

4

- ① ② ③ ④ ⑤ ⑥

① ② ③ ④ ⑤ ⑥

① ② ③ ④ ⑤ ⑥

① ② ③ ④ ⑤ ⑥

## Accumulative Assessment 6

1

- ① ② ③ ④ ⑤ ⑥

① ② ③ ④ ⑤ ⑥

2

- ① ② ③ ④ ⑤ ⑥

① ② ③ ④ ⑤ ⑥

3

- ① ② ③ ④ ⑤ ⑥

① 75,002 75,010 75,200 75,202 75,230

## 6

### Multiplication

- 1 ① Repeated addition  $5 \times 6 = 30$

② Multiplication

- ③ Repeated addition  $5 \times 5 = 25$

④ Multiplication

- ⑤ Repeated addition  $5 \times 6 = 30$

⑥ Multiplication

- ⑦ Repeated addition  $5 \times 5 = 25$

⑧ Multiplication

- ⑨ Repeated addition

⑩ Multiplication

- ⑪ Repeated addition  $5 \times 5 = 25$

⑫ Multiplication

- ⑬ Repeated addition

⑭ Multiplication

Multiplication  $5 \times 6$

- ⑮ Repeated addition  $5 \times 5 = 25$

⑯ Multiplication

- 2 ①  $5 \times 5 = 25$

②  $5 \times 5 = 25$  and  $5 \times 5 = 25$

- ③  $5 \times 5 = 25$

④  $5 \times 5 = 25$  and  $5 \times 5 = 25$

- ⑤  $5 \times 5$

⑥  $5 \times 5 = 25$  and  $5 \times 5 = 25$

- ⑦  $5 \times 5$

⑧  $5 \times 5 = 25$  and  $5 \times 5 = 25$

- ⑨  $5 \times 5 = 25$  and  $5 \times 5 = 25$

⑩  $5 \times 5 = 25$  and  $5 \times 5 = 25$

- ⑪  $5 \times 5 = 25$  and  $5 \times 5 = 25$

⑫  $5 \times 5 = 25$  and  $5 \times 5 = 25$

- ⑬  $5 \times 5$

⑭  $5 \times 5 = 25$  and  $5 \times 5 = 25$

- ⑮  $5 \times 5$

⑯  $5 \times 5 = 25$  and  $5 \times 5 = 25$

- ⑰  $5 \times 5$

⑱  $5 \times 5 = 25$  and  $5 \times 5 = 25$

- ⑲  $5 \times 5 = 25$  and  $5 \times 5 = 25$

⑳  $5 \times 5 = 25$  and  $5 \times 5 = 25$

- ㉑  $5 \times 5 = 25$  and  $5 \times 5 = 25$

- ㉒  $5 \times 5 = 25$  and  $5 \times 5 = 25$

- ㉓  $5 \times 5$

- ㉔  $5 \times 5 = 25$  and  $5 \times 5 = 25$

- ㉕  $5 \times 5 = 25$  and  $5 \times 5 = 25$



## Grade Answers

- ☐ A ☐ B ☐ C ☐ D  
☐ E ☐ F ☐ G ☐ H  
☐ I ☐ J ☐ K ☐ L  
☐ M ☐ N ☐ O ☐ P  
☐ Q ☐ R ☐ S ☐ T  
☐ U ☐ V ☐ W ☐ X  
☐ Y ☐ Z

1

☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J ☐ K ☐ L ☐ M ☐ N ☐ O ☐ P ☐ Q ☐ R ☐ S ☐ T ☐ U ☐ V ☐ W ☐ X ☐ Y ☐ Z

Add: 1 ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J ☐ K ☐ L ☐ M ☐ N ☐ O ☐ P ☐ Q ☐ R ☐ S ☐ T ☐ U ☐ V ☐ W ☐ X ☐ Y ☐ Z

Add: 1 ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J ☐ K ☐ L ☐ M ☐ N ☐ O ☐ P ☐ Q ☐ R ☐ S ☐ T ☐ U ☐ V ☐ W ☐ X ☐ Y ☐ Z

Add: 1 ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J ☐ K ☐ L ☐ M ☐ N ☐ O ☐ P ☐ Q ☐ R ☐ S ☐ T ☐ U ☐ V ☐ W ☐ X ☐ Y ☐ Z

## Accumulative Assessment 7

- ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J ☐ K ☐ L ☐ M ☐ N ☐ O ☐ P ☐ Q ☐ R ☐ S ☐ T ☐ U ☐ V ☐ W ☐ X ☐ Y ☐ Z
- ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J ☐ K ☐ L ☐ M ☐ N ☐ O ☐ P ☐ Q ☐ R ☐ S ☐ T ☐ U ☐ V ☐ W ☐ X ☐ Y ☐ Z
- ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J ☐ K ☐ L ☐ M ☐ N ☐ O ☐ P ☐ Q ☐ R ☐ S ☐ T ☐ U ☐ V ☐ W ☐ X ☐ Y ☐ Z
- ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J ☐ K ☐ L ☐ M ☐ N ☐ O ☐ P ☐ Q ☐ R ☐ S ☐ T ☐ U ☐ V ☐ W ☐ X ☐ Y ☐ Z

7

## Commutative Property in Multiplication

☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J ☐ K ☐ L ☐ M ☐ N ☐ O ☐ P ☐ Q ☐ R ☐ S ☐ T ☐ U ☐ V ☐ W ☐ X ☐ Y ☐ Z

Add: 1 ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J ☐ K ☐ L ☐ M ☐ N ☐ O ☐ P ☐ Q ☐ R ☐ S ☐ T ☐ U ☐ V ☐ W ☐ X ☐ Y ☐ Z

☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J ☐ K ☐ L ☐ M ☐ N ☐ O ☐ P ☐ Q ☐ R ☐ S ☐ T ☐ U ☐ V ☐ W ☐ X ☐ Y ☐ Z

Add: 1 ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J ☐ K ☐ L ☐ M ☐ N ☐ O ☐ P ☐ Q ☐ R ☐ S ☐ T ☐ U ☐ V ☐ W ☐ X ☐ Y ☐ Z

☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J ☐ K ☐ L ☐ M ☐ N ☐ O ☐ P ☐ Q ☐ R ☐ S ☐ T ☐ U ☐ V ☐ W ☐ X ☐ Y ☐ Z

Add: 1 ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J ☐ K ☐ L ☐ M ☐ N ☐ O ☐ P ☐ Q ☐ R ☐ S ☐ T ☐ U ☐ V ☐ W ☐ X ☐ Y ☐ Z

☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J ☐ K ☐ L ☐ M ☐ N ☐ O ☐ P ☐ Q ☐ R ☐ S ☐ T ☐ U ☐ V ☐ W ☐ X ☐ Y ☐ Z

Add: 1 ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J ☐ K ☐ L ☐ M ☐ N ☐ O ☐ P ☐ Q ☐ R ☐ S ☐ T ☐ U ☐ V ☐ W ☐ X ☐ Y ☐ Z

☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J ☐ K ☐ L ☐ M ☐ N ☐ O ☐ P ☐ Q ☐ R ☐ S ☐ T ☐ U ☐ V ☐ W ☐ X ☐ Y ☐ Z

Add: 1 ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J ☐ K ☐ L ☐ M ☐ N ☐ O ☐ P ☐ Q ☐ R ☐ S ☐ T ☐ U ☐ V ☐ W ☐ X ☐ Y ☐ Z

☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J ☐ K ☐ L ☐ M ☐ N ☐ O ☐ P ☐ Q ☐ R ☐ S ☐ T ☐ U ☐ V ☐ W ☐ X ☐ Y ☐ Z

Add: 1 ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J ☐ K ☐ L ☐ M ☐ N ☐ O ☐ P ☐ Q ☐ R ☐ S ☐ T ☐ U ☐ V ☐ W ☐ X ☐ Y ☐ Z

☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J ☐ K ☐ L ☐ M ☐ N ☐ O ☐ P ☐ Q ☐ R ☐ S ☐ T ☐ U ☐ V ☐ W ☐ X ☐ Y ☐ Z

Add: 1 ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J ☐ K ☐ L ☐ M ☐ N ☐ O ☐ P ☐ Q ☐ R ☐ S ☐ T ☐ U ☐ V ☐ W ☐ X ☐ Y ☐ Z

☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J ☐ K ☐ L ☐ M ☐ N ☐ O ☐ P ☐ Q ☐ R ☐ S ☐ T ☐ U ☐ V ☐ W ☐ X ☐ Y ☐ Z

Add: 1 ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J ☐ K ☐ L ☐ M ☐ N ☐ O ☐ P ☐ Q ☐ R ☐ S ☐ T ☐ U ☐ V ☐ W ☐ X ☐ Y ☐ Z

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Add: 1 ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J ☐ K ☐ L ☐ M ☐ N ☐ O ☐ P ☐ Q ☐ R ☐ S ☐ T ☐ U ☐ V ☐ W ☐ X ☐ Y ☐ Z

X

☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J ☐ K ☐ L ☐ M ☐ N ☐ O ☐ P ☐ Q ☐ R ☐ S ☐ T ☐ U ☐ V ☐ W ☐ X ☐ Y ☐ Z

Add: 1 ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J ☐ K ☐ L ☐ M ☐ N ☐ O ☐ P ☐ Q ☐ R ☐ S ☐ T ☐ U ☐ V ☐ W ☐ X ☐ Y ☐ Z

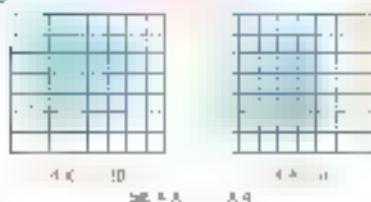
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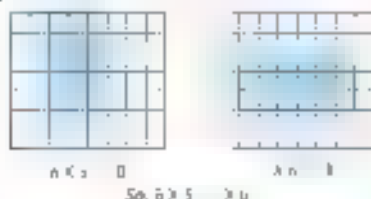
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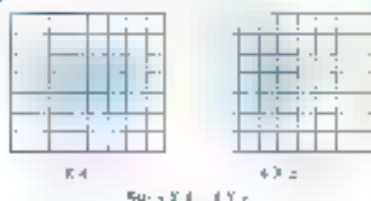
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99. ☐ 11, ☐ 12, ☐ 13, ☐ 14
100. ☐ 11, ☐ 12, ☐ 13, ☐ 14

11

And 4, then 3  
So,  $3 \times 4 + 4 \times 3 = 24$

## Accumulative Assessment

1

1. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

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1. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

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1. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

Number of columns = 10  
Number of squares in each column = 10  
Total number of squares =  $10 \times 10 = 100$

Number of rows = 10  
Number of squares in each row = 10  
Total number of squares =  $10 \times 10 = 100$

## Exercises on Chapter 3

### 1 & 2

### Word Problems and Applications on Multiplication

1. ☐ 1, ☐ 2, ☐ 3, ☐ 4, ☐ 5, ☐ 6, ☐ 7, ☐ 8, ☐ 9, ☐ 10, ☐ 11, ☐ 12, ☐ 13, ☐ 14, ☐ 15, ☐ 16, ☐ 17, ☐ 18, ☐ 19, ☐ 20, ☐ 21, ☐ 22, ☐ 23, ☐ 24, ☐ 25, ☐ 26, ☐ 27, ☐ 28, ☐ 29, ☐ 30, ☐ 31, ☐ 32, ☐ 33, ☐ 34, ☐ 35, ☐ 36, ☐ 37, ☐ 38, ☐ 39, ☐ 40, ☐ 41, ☐ 42, ☐ 43, ☐ 44, ☐ 45, ☐ 46, ☐ 47, ☐ 48, ☐ 49, ☐ 50, ☐ 51, ☐ 52, ☐ 53, ☐ 54, ☐ 55, ☐ 56, ☐ 57, ☐ 58, ☐ 59, ☐ 60, ☐ 61, ☐ 62, ☐ 63, ☐ 64, ☐ 65, ☐ 66, ☐ 67, ☐ 68, ☐ 69, ☐ 70, ☐ 71, ☐ 72, ☐ 73, ☐ 74, ☐ 75, ☐ 76, ☐ 77, ☐ 78, ☐ 79, ☐ 80, ☐ 81, ☐ 82, ☐ 83, ☐ 84, ☐ 85, ☐ 86, ☐ 87, ☐ 88, ☐ 89, ☐ 90, ☐ 91, ☐ 92, ☐ 93, ☐ 94, ☐ 95, ☐ 96, ☐ 97, ☐ 98, ☐ 99, ☐ 100

2

1. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100





- 7 ☐ A 6 ☐ B 4 ☐ C 3 ☐ D 2
- ☐ E 4 ☐ F 7 ☐ G 11 ☐ H 13 ☐ I > ☐ J <
- ☐ K < ☐ L 5 ☐ M 5 ☐ N 5 ☐ O 5 ☐ P >
- 8 ☐ Q 3 ☐ R 3 ☐ S 3 ☐ T 3 ☐ U 3
- ☐ V 3 ☐ W 3 ☐ X 3 ☐ Y 3 ☐ Z 3
- ☐ AA 3 ☐ AB 3 ☐ AC 3 ☐ AD 3 ☐ AE 3
- ☐ AF 3 ☐ AG 3 ☐ AH 3 ☐ AI 3 ☐ AJ 3
- ☐ AK 3 ☐ AL 3 ☐ AM 3 ☐ AN 3 ☐ AO 3
- ☐ AP 3 ☐ AQ 3 ☐ AR 3 ☐ AS 3 ☐ AT 3
- ☐ AU 3 ☐ AV 3 ☐ AW 3 ☐ AX 3 ☐ AY 3
- ☐ AZ 3 ☐ BA 3 ☐ BB 3 ☐ BC 3 ☐ BD 3
- ☐ BE 3 ☐ BF 3 ☐ BG 3 ☐ BH 3 ☐ BI 3
- ☐ BJ 3 ☐ BK 3 ☐ BL 3 ☐ BM 3 ☐ BN 3
- ☐ BO 3 ☐ BP 3 ☐ BQ 3 ☐ BR 3 ☐ BS 3
- ☐ BT 3 ☐ BU 3 ☐ BV 3 ☐ BW 3 ☐ BX 3
- ☐ BY 3 ☐ BZ 3 ☐ CA 3 ☐ CB 3
- ☐ CC 3 ☐ CD 3 ☐ CE 3 ☐ CF 3 ☐ CG 3
- ☐ CH 3 ☐ CI 3 ☐ CJ 3 ☐ CK 3 ☐ CL 3
- ☐ CM 3 ☐ CN 3 ☐ CO 3 ☐ CP 3 ☐ CQ 3
- ☐ CR 3 ☐ CS 3 ☐ CT 3 ☐ CU 3 ☐ CV 3
- ☐ CW 3 ☐ CX 3 ☐ CY 3 ☐ CZ 3
- ☐ DA 3 ☐ DB 3 ☐ DC 3 ☐ DD 3
- ☐ DE 3 ☐ DF 3 ☐ DG 3 ☐ DH 3
- ☐ DI 3 ☐ DJ 3 ☐ DK 3 ☐ DL 3
- ☐ DM 3 ☐ DN 3 ☐ DO 3 ☐ DP 3
- ☐ DQ 3 ☐ DR 3 ☐ DS 3 ☐ DT 3
- ☐ DU 3 ☐ DV 3 ☐ DW 3 ☐ DX 3
- ☐ DY 3 ☐ DZ 3 ☐ EA 3 ☐ EB 3
- ☐ EC 3 ☐ ED 3 ☐ EE 3 ☐ EF 3
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- ☐ GL 3 ☐ GM 3 ☐ GN 3 ☐ GO 3
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- ☐ GT 3 ☐ GU 3 ☐ GV 3 ☐ GW 3
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- ☐ HZ 3 ☐ IA 3 ☐ IB 3 ☐ IC 3
- ☐ ID 3 ☐ IE 3 ☐ IF 3 ☐ IG 3
- ☐ IH 3 ☐ II 3 ☐ IJ 3 ☐ IK 3
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- ☐ KH 3 ☐ KI 3 ☐ KJ 3 ☐ KK 3
- ☐ KL 3 ☐ KM 3 ☐ KN 3 ☐ KO 3
- ☐ KP 3 ☐ KQ 3 ☐ KR 3 ☐ KS 3
- ☐ KT 3 ☐ KU 3 ☐ KV 3 ☐ KW 3
- ☐ KX 3 ☐ KY 3 ☐ KZ 3 ☐ LA 3
- ☐ LB 3 ☐ LC 3 ☐ LD 3 ☐ LE 3
- ☐ LF 3 ☐ LG 3 ☐ LH 3 ☐ LI 3
- ☐ LJ 3 ☐ LK 3 ☐ LL 3 ☐ LM 3
- ☐ LN 3 ☐ LO 3 ☐ LP 3 ☐ LQ 3
- ☐ LR 3 ☐ LS 3 ☐ LT 3 ☐ LU 3
- ☐ LV 3 ☐ LW 3 ☐ LX 3 ☐ LY 3
- ☐ LZ 3 ☐ MA 3 ☐ MB 3 ☐ MC 3
- ☐ MD 3 ☐ ME 3 ☐ MF 3 ☐ MG 3
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- ☐ ML 3 ☐ MM 3 ☐ MN 3 ☐ MO 3
- ☐ MP 3 ☐ MQ 3 ☐ MR 3 ☐ MS 3
- ☐ MT 3 ☐ MU 3 ☐ MV 3 ☐ MW 3
- ☐ MX 3 ☐ MY 3 ☐ MZ 3 ☐ NA 3
- ☐ NB 3 ☐ NC 3 ☐ ND 3 ☐ NE 3
- ☐ NF 3 ☐ NG 3 ☐ NH 3 ☐ NI 3
- ☐ NJ 3 ☐ NK 3 ☐ NL 3 ☐ NM 3
- ☐ NO 3 ☐ NP 3 ☐ NQ 3 ☐ NR 3
- ☐ NS 3 ☐ NT 3 ☐ NU 3 ☐ NV 3
- ☐ NW 3 ☐ NX 3 ☐ NY 3 ☐ NZ 3
- ☐ OA 3 ☐ OB 3 ☐ OC 3 ☐ OD 3
- ☐ OE 3 ☐ OF 3 ☐ OG 3 ☐ OH 3
- ☐ OI 3 ☐ OJ 3 ☐ OK 3 ☐ OL 3
- ☐ OM 3 ☐ ON 3 ☐ OO 3 ☐ OP 3
- ☐ OQ 3 ☐ OR 3 ☐ OS 3 ☐ OT 3
- ☐ OU 3 ☐ OV 3 ☐ OW 3 ☐ OX 3
- ☐ OY 3 ☐ OZ 3 ☐ PA 3 ☐ PB 3
- ☐ PC 3 ☐ PD 3 ☐ PE 3 ☐ PF 3
- ☐ PG 3 ☐ PH 3 ☐ PI 3 ☐ PJ 3
- ☐ PK 3 ☐ PL 3 ☐ PM 3 ☐ PN 3
- ☐ PO 3 ☐ PP 3 ☐ PQ 3 ☐ PR 3
- ☐ PS 3 ☐ PT 3 ☐ PU 3 ☐ PV 3
- ☐ PW 3 ☐ PX 3 ☐ PY 3 ☐ PZ 3
- ☐ QA 3 ☐ QB 3 ☐ QC 3 ☐ QD 3
- ☐ QE 3 ☐ QF 3 ☐ QG 3 ☐ QH 3
- ☐ QI 3 ☐ QJ 3 ☐ QK 3 ☐ QL 3
- ☐ QM 3 ☐ QN 3 ☐ QO 3 ☐ QP 3
- ☐ QQ 3 ☐ QR 3 ☐ QS 3 ☐ QT 3
- ☐ QU 3 ☐ QV 3 ☐ QW 3 ☐ QX 3
- ☐ QY 3 ☐ QZ 3 ☐ RA 3 ☐ RB 3
- ☐ RC 3 ☐ RD 3 ☐ RE 3 ☐ RF 3
- ☐ RG 3 ☐ RH 3 ☐ RI 3 ☐ RJ 3
- ☐ RK 3 ☐ RL 3 ☐ RM 3 ☐ RN 3
- ☐ RO 3 ☐ RP 3 ☐ RQ 3 ☐ RR 3
- ☐ RS 3 ☐ RT 3 ☐ RU 3 ☐ RV 3
- ☐ RW 3 ☐ RX 3 ☐ RY 3 ☐ RZ 3
- ☐ SA 3 ☐ SB 3 ☐ SC 3 ☐ SD 3
- ☐ SE 3 ☐ SF 3 ☐ SG 3 ☐ SH 3
- ☐ SI 3 ☐ SJ 3 ☐ SK 3 ☐ SL 3
- ☐ SM 3 ☐ SN 3 ☐ SO 3 ☐ SP 3
- ☐ SQ 3 ☐ SR 3 ☐ SS 3 ☐ ST 3
- ☐ SU 3 ☐ SV 3 ☐ SW 3 ☐ SX 3
- ☐ SY 3 ☐ SZ 3 ☐ TA 3 ☐ TB 3
- ☐ TC 3 ☐ TD 3 ☐ TE 3 ☐ TF 3
- ☐ TG 3 ☐ TH 3 ☐ TI 3 ☐ TJ 3
- ☐ TK 3 ☐ TL 3 ☐ TM 3 ☐ TN 3
- ☐ TO 3 ☐ TP 3 ☐ TQ 3 ☐ TR 3
- ☐ TS 3 ☐ TT 3 ☐ TU 3 ☐ TV 3
- ☐ TW 3 ☐ TX 3 ☐ TY 3 ☐ TZ 3
- ☐ UA 3 ☐ UB 3 ☐ UC 3 ☐ UD 3
- ☐ UE 3 ☐ UF 3 ☐ UG 3 ☐ UH 3
- ☐ UI 3 ☐ UJ 3 ☐ UK 3 ☐ UL 3
- ☐ UM 3 ☐ UN 3 ☐ UO 3 ☐ UP 3
- ☐ UQ 3 ☐ UR 3 ☐ US 3 ☐ UT 3
- ☐ UJ 3 ☐ UV 3 ☐ UW 3 ☐ UX 3
- ☐ UY 3 ☐ UZ 3 ☐ VA 3 ☐ VB 3
- ☐ VC 3 ☐ VD 3 ☐ VE 3 ☐ VF 3
- ☐ VG 3 ☐ VH 3 ☐ VI 3 ☐ VJ 3
- ☐ VK 3 ☐ VL 3 ☐ VM 3 ☐ VN 3
- ☐ VO 3 ☐ VP 3 ☐ VQ 3 ☐ VR 3
- ☐ VS 3 ☐ VT 3 ☐ VU 3 ☐ VV 3
- ☐ VW 3 ☐ VX 3 ☐ VY 3 ☐ VZ 3
- ☐ WA 3 ☐ WB 3 ☐ WC 3 ☐ WD 3
- ☐ WE 3 ☐ WF 3 ☐ WG 3 ☐ WH 3
- ☐ WI 3 ☐ WJ 3 ☐ WK 3 ☐ WL 3
- ☐ WM 3 ☐ WN 3 ☐ WO 3 ☐ WP 3
- ☐ WQ 3 ☐ WR 3 ☐ WS 3 ☐ WT 3
- ☐ WJ 3 ☐ WV 3 ☐ WW 3 ☐ WX 3
- ☐ WY 3 ☐ WZ 3 ☐ XA 3 ☐ XB 3
- ☐ XC 3 ☐ XD 3 ☐ XE 3 ☐ XF 3
- ☐ XG 3 ☐ XH 3 ☐ XI 3 ☐ XJ 3
- ☐ XK 3 ☐ XL 3 ☐ XM 3 ☐ XN 3
- ☐ XO 3 ☐ XP 3 ☐ XQ 3 ☐ XR 3
- ☐ XS 3 ☐ XT 3 ☐ XU 3 ☐ XV 3
- ☐ XW 3 ☐ XX 3 ☐ XY 3 ☐ XZ 3
- ☐ YA 3 ☐ YB 3 ☐ YC 3 ☐ YD 3
- ☐ YE 3 ☐ YF 3 ☐ YG 3 ☐ YH 3
- ☐ YI 3 ☐ YJ 3 ☐ YK 3 ☐ YL 3
- ☐ YM 3 ☐ YN 3 ☐ YO 3 ☐ YP 3
- ☐ YQ 3 ☐ YR 3 ☐ YS 3 ☐ YT 3
- ☐ YJ 3 ☐ YV 3 ☐ YW 3 ☐ YX 3
- ☐ YY 3 ☐ YZ 3 ☐ ZA 3 ☐ ZB 3
- ☐ ZC 3 ☐ ZD 3 ☐ ZE 3 ☐ ZF 3
- ☐ ZG 3 ☐ ZH 3 ☐ ZI 3 ☐ ZJ 3
- ☐ ZK 3 ☐ ZL 3 ☐ ZM 3 ☐ ZN 3
- ☐ ZO 3 ☐ ZP 3 ☐ ZQ 3 ☐ ZR 3
- ☐ ZS 3 ☐ ZT 3 ☐ ZU 3 ☐ ZV 3
- ☐ ZW 3 ☐ ZX 3 ☐ ZY 3 ☐ ZZ 3

- 9 ☐ A 3 ☐ B 4 ☐ C 5 ☐ D 6
- ☐ E 7 ☐ F 8 ☐ G 9 ☐ H 10
- ☐ I 11 ☐ J 12 ☐ K 13 ☐ L 14
- ☐ M 15 ☐ N 16 ☐ O 17 ☐ P 18
- ☐ Q 19 ☐ R 20 ☐ S 21 ☐ T 22
- ☐ U 23 ☐ V 24 ☐ W 25 ☐ X 26
- ☐ Y 27 ☐ Z 28 ☐ AA 29 ☐ AB 30
- ☐ AC 31 ☐ AD 32 ☐ AE 33 ☐ AF 34
- ☐ AG 35 ☐ AH 36 ☐ AI 37 ☐ AJ 38
- ☐ AK 39 ☐ AL 40 ☐ AM 41 ☐ AN 42
- ☐ AO 43 ☐ AP 44 ☐ AQ 45 ☐ AR 46
- ☐ AS 47 ☐ AT 48 ☐ AU 49 ☐ AV 50
- ☐ AW 51 ☐ AX 52 ☐ AY 53 ☐ AZ 54
- ☐ BA 55 ☐ BB 56 ☐ BC 57 ☐ BD 58
- ☐ BE 59 ☐ BF 60 ☐ BG 61 ☐ BH 62
- ☐ BI 63 ☐ BJ 64 ☐ BK 65 ☐ BL 66
- ☐ BM 67 ☐ BN 68 ☐ BO 69 ☐ BP 70
- ☐ BQ 71 ☐ BR 72 ☐ BS 73 ☐ BT 74
- ☐ BU 75 ☐ BV 76 ☐ BW 77 ☐ BX 78
- ☐ BY 79 ☐ BZ 80 ☐ CA 81 ☐ CB 82
- ☐ CC 83 ☐ CD 84 ☐ CE 85 ☐ CF 86
- ☐ CG 87 ☐ CH 88 ☐ CI 89 ☐ CJ 90
- ☐ CK 91 ☐ CL 92 ☐ CM 93 ☐ CN 94
- ☐ CO 95 ☐ CP 96 ☐ CQ 97 ☐ CR 98
- ☐ CS 99 ☐ CT 100 ☐ CU 101 ☐ CV 102
- ☐ CW 103 ☐ CX 104 ☐ CY 105 ☐ CZ 106
- ☐ DA 107 ☐ DB 108 ☐ DC 109 ☐ DD 110
- ☐ DE 111 ☐ DF 112 ☐ DG 113 ☐ DH 114
- ☐ DI 115 ☐ DJ 116 ☐ DK 117 ☐ DL 118
- ☐ DM 119 ☐ DN 120 ☐ DO 121 ☐ DP 122
- ☐ DQ 123 ☐ DR 124 ☐ DS 125 ☐ DT 126
- ☐ DU 127 ☐ DV 128 ☐ DW 129 ☐ DX 130
- ☐ DY 131 ☐ DZ 132 ☐ EA 133 ☐ EB 134
- ☐ EC 135 ☐ ED 136 ☐ EE 137 ☐ EF 138
- ☐ EG 139 ☐ EH 140 ☐ EI 141 ☐ EJ 142
- ☐ EK 143 ☐ EL 144 ☐ EM 145 ☐ EN 146
- ☐ EO 147 ☐ EP 148 ☐ EQ 149 ☐ ER 150
- ☐ ES 151 ☐ ET 152 ☐ EU 153 ☐ EV 154
- ☐ EW 155 ☐ EX 156 ☐ EY 157 ☐ EZ 158
- ☐ FA 159 ☐ FB 160 ☐ FC 161 ☐ FD 162
- ☐ FE 163 ☐ FG 164 ☐ FH 165 ☐ FI 166
- ☐ FJ 167 ☐ FK 168 ☐ FL 169 ☐ FM 170
- ☐ FN 171 ☐ FO 172 ☐ FP 173 ☐ FQ 174
- ☐ FR 175 ☐ FS 176 ☐ FT 177 ☐ FU 178
- ☐ FV 179 ☐ FW 180 ☐ FX 181 ☐ FY 182
- ☐ FZ 183 ☐ GA 184 ☐ GB 185 ☐ GC 186
- ☐ GD 187 ☐ GE 188 ☐ GF 189 ☐ GH 190
- ☐ GI 191 ☐ GJ 192 ☐ GK 193 ☐ GL 194
- ☐ GM 195 ☐ GN 196 ☐ GO 197 ☐ GP 198
- ☐ GQ 199 ☐ GR 200 ☐ GS 201 ☐ GT 202
- ☐ GU 203 ☐ GV 204 ☐ GW 205 ☐ GX 206
- ☐ GY 207 ☐ GZ 208 ☐ HA 209 ☐ HB 210
- ☐ HC 211 ☐ HD 212 ☐ HE 213 ☐ HF 214
- ☐ HG 215 ☐ HH 216 ☐ HI 217 ☐ HJ 218
- ☐ HK 219 ☐ HL 220 ☐ HM 221 ☐ HN 222
- ☐ HO 223 ☐ HP 224 ☐ HQ 225 ☐ HR 226
- ☐ HS 227 ☐ HT 228 ☐ HU 229 ☐ HV 230
- ☐ HW 231 ☐ HX 232 ☐ HY 233 ☐ HZ 234
- ☐ IA 235 ☐ IB 236 ☐ IC 237 ☐ ID 238
- ☐ IE 239 ☐ IF 240 ☐ IG 241 ☐ IH 242
- ☐ II 243 ☐ IJ 244 ☐ IK 245 ☐ IL 246
- ☐ IM 247 ☐ IN 248 ☐ IO 249 ☐ IP 250
- ☐ IQ 251 ☐ IR 252 ☐ IS 253 ☐ IT 254
- ☐ IU 255 ☐ IV 256 ☐ IW 257 ☐ IX 258
- ☐ IY 259 ☐ IZ 260 ☐ JA 261 ☐ JB 262
- ☐ JC 263 ☐ JD 264 ☐ JE 265 ☐ JF 266
- ☐ JG 267 ☐ JH 268 ☐ JI 269 ☐ JJ 270
- ☐ JK 271 ☐ JL 272 ☐ JM 273 ☐ JN 274
- ☐ JO 275 ☐ JP 276 ☐ JQ 277 ☐ JR 278
- ☐ JS 279 ☐ JT 280 ☐ JU 281 ☐ JV 282
- ☐ JW 283 ☐ JX 284 ☐ JY 285 ☐ JZ 286
- ☐ KA 287 ☐ KB 288 ☐ KC 289 ☐ KD 290
- ☐ KE 291 ☐ KF 292 ☐ KG 293 ☐ KH 294
- ☐ KI 295 ☐ KJ 296 ☐ KK 297 ☐ KL 298
- ☐ KM 299 ☐ KN 300 ☐ KO 301 ☐ KP 302
- ☐ KQ 303 ☐ KR 304 ☐ KS 305 ☐ KT 306
- ☐ KU 307 ☐ KV 308 ☐ KW 309 ☐ KX 310
- ☐ KY 311 ☐ KZ 312 ☐ LA 313 ☐ LB 314
- ☐ LC 315 ☐ LD 316 ☐ LE 317 ☐ LF 318
- ☐ LG 319 ☐ LH 320 ☐ LI 321 ☐ LJ 322
- ☐ LK 323 ☐ LL 324 ☐ LM 325 ☐ LN 326
- ☐ LO 327 ☐ LP 328 ☐ LQ 329 ☐ LR 330
- ☐ LS 331 ☐ LT 332 ☐ LU 333 ☐ LV 334
- ☐ LW 335 ☐ LX 336 ☐ LY 337 ☐ LZ 338
- ☐ MA 339 ☐ MB 340 ☐ MC 341 ☐ MD 342
- ☐ ME 343 ☐ MF 344 ☐ MG 345 ☐ MH 346
- ☐ MI 347 ☐ MJ 348 ☐ MK 349 ☐ ML 350
- ☐ MN 351 ☐ MO 352 ☐ MP 353 ☐ MQ 354
- ☐ MR 355 ☐ MS 356 ☐ MT 357 ☐ MU 358
- ☐ MV 359 ☐ MW 360 ☐ MX 361 ☐ MY 362
- ☐ MZ 363 ☐ NA 364 ☐ NB 365 ☐ NC 366
- ☐ ND 367 ☐ NE 368 ☐ NF 369 ☐ NG 370
- ☐ NH 371 ☐ NI 372 ☐ NJ 373 ☐ NK 374
- ☐ NL 375 ☐ NM 376 ☐ NO 377 ☐ NP 378
- ☐ NQ 379 ☐ NR 380 ☐ NS 381 ☐ NT 382
- ☐ NU 383 ☐ NV 384 ☐ NW 385 ☐ NX 386
- ☐ NY 387 ☐ NZ 388 ☐ OA 389 ☐ OB 390
- ☐ OC 391 ☐ OD 392 ☐ OE 393 ☐ OF 394
- ☐ OG 395 ☐ OH 396 ☐ OI 397 ☐ OJ 398
- ☐ OK 399 ☐ OL 400 ☐ OM 401 ☐ ON 402
- ☐ OO 403 ☐ OP 404 ☐ OQ 405 ☐ OR 406
- ☐ OS 407 ☐ OT 408 ☐ OU 409 ☐ OV 410
- ☐ OW 411 ☐ OX 412 ☐ OY 413 ☐ OZ 414
-





## Grade Answers

7.  $-4 \times 4$

8.  $5$

9.  $100 \times 10$

10. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

### Accumulative Assessment 13

1. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

2. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

3. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

4. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

5. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

6. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

7. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

8. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

9. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

10. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

11. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

12. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

13. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

14. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

15. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

16. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

17. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

18. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

19. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

20. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

21. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

22. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

23. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

24. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

25. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

26. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

27. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

28. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

29. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

30. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

31. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

32. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

33. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

34. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

35. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

36. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

37. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

38. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

39. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

40. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

41. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

42. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

43. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

44. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

45. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

46. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

47. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

48. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

49. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

50. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

51. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

52. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

53. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

54. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

55. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

56. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

57. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

58. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

59. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

60. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

61. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

62. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

63. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

64. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

65. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

66. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

67. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

68. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

69. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

70. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

71. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

72. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

73. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

74. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

75. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

76. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

77. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

78. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

79. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

80. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

81. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

82. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

83. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

84. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

85. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

86. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

87. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

88. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

89. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

90. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

91. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

92. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

93. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

94. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

95. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

96. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

97. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

98. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

99. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

100. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

101. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

102. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

103. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

104. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

105. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

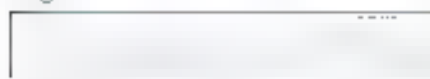
106. ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J

107. ☐ A ☐ B <

2 ②



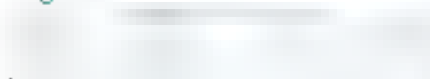
①



③



④



⑤



⑥



3 ②

③

④ Pentagon

⑤ Hexagon

4 ①

② Triangle

③ Quadrilateral

④ Pentagon

⑤ Hexagon

⑥ Heptagon

⑦ Octagon

⑧ Nonagon

⑨ Decagon

⑩ Undecagon

⑪ Dodecagon

⑫ Tridecagon

## Accumulative Assessment 15

1 ②

③

④

⑤

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⑦

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2 ①

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4 ①

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## 2

### Properties of Quadrilaterals

1 ①

②

③

④

⑤ Square

⑥ Trapezoid

⑦ Rhombus

2

①

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5

[illegible]

1.  $1000000 = 10^6$   $10^6$   $10^6$   
 2.  $1000000 = 10^6$   $10^6$   $10^6$   
 3.  $1000000 = 10^6$   $10^6$   $10^6$   
 4.  $1000000 = 10^6$   $10^6$   $10^6$   
 5.  $1000000 = 10^6$   $10^6$   $10^6$   
 6.  $1000000 = 10^6$   $10^6$   $10^6$   
 7.  $1000000 = 10^6$   $10^6$   $10^6$   
 8.  $1000000 = 10^6$   $10^6$   $10^6$   
 9.  $1000000 = 10^6$   $10^6$   $10^6$   
 10.  $1000000 = 10^6$   $10^6$   $10^6$

3



Area of shape

Area of shape

Area of shape

Area of shape

Area of shape

The total area is

### Accumulative Assessment (17)

- ☐ 4,000 ☐ 4 ☐ 60  
☐ 10 ☐ 100,000
- ☐ 45 ☐ 10 ☐ 1 ☐ 100  
☐ equal ☐ 0.1, 1, 0.1
- ☐ 2 ☐ 2 ☐ 2 ☐ 2  
☐ 10 ☐ 10 ☐ 4

446

### Rectangles with Equal Area Area Using Models

1 ☐ 16 square units  
 $W = 5 \times 16$   
 $W = 8 \times 2$   
 $W = 4 \times 4$

2 ☐ 4 square units  
 $4 = 2 \times 2$   
 $4 = 4 \times 1$

3 ☐ 20 square units  
 $20 = 5 \times 10$   
 $20 = 4 \times 5$

### Guide Answers

1 ☐ 16 square units  
 $W = 5 \times 16$   
 $W = 8 \times 2$   
 $W = 4 \times 4$

2 ☐ 4 square units  
 $4 = 2 \times 2$   
 $4 = 4 \times 1$

2

1 <input type="radio"/> 5 square units	1 <input type="radio"/> 5 square units
2 <input type="radio"/> 5 square units	2 <input type="radio"/> 5 square units
3 <input type="radio"/> 5 square units	3 <input type="radio"/> 5 square units
4 <input type="radio"/> 5 square units	4 <input type="radio"/> 5 square units
5 <input type="radio"/> 5 square units	5 <input type="radio"/> 5 square units
6 <input type="radio"/> 5 square units	6 <input type="radio"/> 5 square units
7 <input type="radio"/> 5 square units	7 <input type="radio"/> 5 square units
8 <input type="radio"/> 5 square units	8 <input type="radio"/> 5 square units
9 <input type="radio"/> 5 square units	9 <input type="radio"/> 5 square units
10 <input type="radio"/> 5 square units	10 <input type="radio"/> 5 square units

### Accumulative Assessment (18)

- ☐ 4,000 ☐ 4,000 ☐ 4  
☐ 1 ☐ 1,000 ☐ 10
- ☐ Ones ☐ 5,000 ☐ 10  
☐ 10 ☐ 1,000 ☐ 100
- ☐ 10 ☐ 10 ☐ 10  
☐ 10 ☐ 10 ☐ 10

687

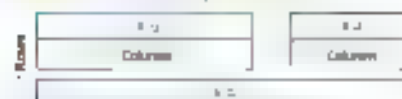
### Area by Splitting Arrays Distributive Property on Multiplication

10	10
10	10
10	10
10	10
10	10
10	10
10	10
10	10
10	10
10	10



# Creative Answers

$$10 \times 10 = 100 \quad 10 \times 10 = 100 \quad 10 \times 10 = 100$$



$$10 \times 10 = 100$$

$$10 \times 10 = 100$$

$$10 \times 10 = 100$$

$$10 \times 10 = 100$$

$$10 \times 10 = 100$$

$$10 \times 10 = 100$$

$$10 \times 10 = 100$$

10



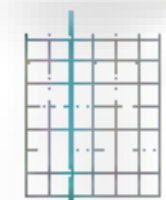
$$10 \times 10 = 100$$

$$10 \times 10 = 100$$



$$10 \times 10 = 100$$

$$10 \times 10 = 100$$

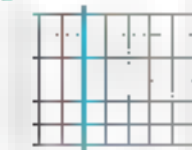


$$10 \times 10 = 100$$

$$10 \times 10 = 100$$

10 (10) is more than 100 (100).

10



10



$$10 \times 10 = 100$$

$$10 \times 10 = 100$$

10



10



$$10 \times 10 = 100$$

$$10 \times 10 = 100$$

10



10



$$10 \times 10 = 100$$

$$10 \times 10 = 100$$

$$10 \times 10 = 100$$

$$10 \times 10 = 100$$

$$10 \times 10 = 100$$

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$$10 \times 10 = 100$$

## Accumulative Assessment 19

$$10 \times 10 = 100$$

$$10 \times 10 = 100$$

$$10 \times 10 = 100$$

$$10 \times 10 = 100$$

$$10 \times 10 = 100$$

$$10 \times 10 = 100$$

$$10 \times 10 = 100$$

# Exercises on Chapter 5

1

## Perimeter of Polygons

- ☒ a.  $A + b$  length unit

☐ b.  $A$  length unit

☐ c.  $A + b$  length unit

☐ d.  $A + b$  length unit

☐ e.  $A + b$  length unit
- ☐ a.  $4 \text{ m} + 3 \text{ m} + 4 \text{ m} + 3 \text{ m}$

Perimeter =  $14 \text{ m}$

☐ b.  $4 \text{ m} + 3 \text{ m} + 3 \text{ m} + 3 \text{ m}$

Perimeter =  $13 \text{ m}$

☐ c.  $4 \text{ m} + 3 \text{ m} + 4 \text{ m} + 3 \text{ m}$

Perimeter =  $14 \text{ m}$

☐ d.  $4 \text{ m} + 3 \text{ m} + 3 \text{ m} + 4 \text{ m}$

Perimeter =  $14 \text{ m}$

☐ e.  $4 \text{ m} + 3 \text{ m} + 3 \text{ m} + 3 \text{ m}$

Perimeter =  $13 \text{ m}$
- ☐ a. Perimeter =  $6 + 3 + 4 + 3 + 4 = 20 \text{ m}$

☐ b. Perimeter =  $6 + 3 + 4 + 3 + 4 = 20 \text{ m}$

☐ c. Perimeter =  $6 + 3 + 4 + 3 + 4 = 20 \text{ m}$

☐ d. Perimeter =  $6 + 3 + 4 + 3 + 4 = 20 \text{ m}$

☐ e. Perimeter =  $6 + 3 + 4 + 3 + 4 = 20 \text{ m}$

## Accumulative Assessment (20)

- ☐ a. 100

☐ b. 1000

☐ c. 10000

☐ d. 100000
- ☐ a. 100

☐ b. 1000

☐ c. 10000

☐ d. 100000
- ☐ a. Perimeter =  $6 + 3 + 4 + 3 + 4 = 20 \text{ m}$

☐ b. Perimeter =  $6 + 3 + 4 + 3 + 4 = 20 \text{ m}$

☐ c. Perimeter =  $6 + 3 + 4 + 3 + 4 = 20 \text{ m}$

☐ d. Perimeter =  $6 + 3 + 4 + 3 + 4 = 20 \text{ m}$

2-4

## Perimeter and Area Area Using the Dimensions Area Using Different Strategies

- ☐ a. Area =  $6 \times 6 = 36$  square units

Perimeter =  $6 + 6 + 6 + 6 = 24$  length units
- ☐ a. Area =  $6 \times 6 = 36$  square units

Perimeter =  $6 + 6 + 6 + 6 = 24$  length units
- ☐ a. Area =  $6 \times 6 = 36$  square units

Perimeter =  $6 + 6 + 6 + 6 = 24$  length units
- ☐ a. Area =  $6 \times 6 = 36$  square units

Perimeter =  $6 + 6 + 6 + 6 = 24$  length units

2

Shape	Perimeter	Area
	$5 + 3 + 5 + 3 = 16$ units	$5 \times 3 = 15$ square units
	$5 + 3 + 5 + 3 = 16$ units	$5 \times 3 = 15$ square units
	$5 + 3 + 5 + 3 = 16$ units	$5 \times 3 = 15$ square units

3

	First Strategy	Second Strategy
	Area = $5 \times 3 = 15$ square units	Area = $5 \times 3 = 15$ square units
	Area = $5 \times 3 = 15$ square units	Area = $5 \times 3 = 15$ square units
	Area = $5 \times 3 = 15$ square units	Area = $5 \times 3 = 15$ square units
	Area = $5 \times 3 = 15$ square units	Area = $5 \times 3 = 15$ square units

4

- ☐ a. Area =  $5 \times 5 = 25$  square units

☐ b. Area =  $5 \times 5 = 25$  square units

## Grade 4 Answers

1. ☐ A Area of A = 11 square cm  
☐ B Area of B = 11 square cm  
☐ C Area of B = 11 square cm  
☐ D Area of the figure in part B is 11 square cm
2. ☐ A Area of the second figure is 7 square cm  
☐ B The approximate perimeter is 16  
☐ C Area of the rectangle = 16 square cm  
☐ D Area of the square = 16 square cm  
☐ E Area of the remaining part is 16 square cm

## Accumulative Assessment [21]

1. ☐ A 1000  
☐ B 10000  
☐ C 100000  
☐ D 1000000
2. ☐ A 1000  
☐ B 10000  
☐ C 100000  
☐ D 1000000
3. ☐ A Area = 100 square units  
 Perimeter = 10 length units  
 Area = 100 square units  
 Perimeter = 10 length units  
☐ B 500  
☐ C 5000  
☐ D 50000

## 5&6

### Different Perimeters for the Same Area · Different Areas for the Same Perimeter

1. ☐ A
2. ☐ A Area = 2 square units  
 Perimeter = 6 length units  
☐ B Area = 2 square units  
 Perimeter = 6 length units
3. ☐ A Area = 6 square units  
 Perimeter = 10 length units  
☐ B Area = 6 square units  
 Perimeter = 10 length units

4. ☐ A Area = 10 square units  
 Perimeter = 10 length units  
☐ B Area = 10 square units  
 Perimeter = 6 length units

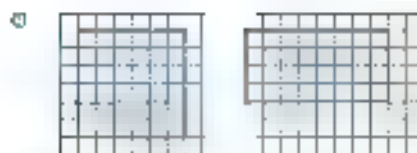
5. ☐ A Area = 10 square units  
 Perimeter = 10 length units  
☐ B Area = 10 square units  
 Perimeter = 10 length units

6. ☐ A Area = 10 square units  
 Perimeter = 10 length units  
☐ B Area = 10 square units  
 Perimeter = 10 length units

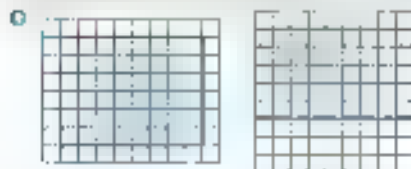
7. ☐ A Area = 10 square units  
 Perimeter = 10 length units  
☐ B Area = 10 square units  
 Perimeter = 10 length units

8. ☐ A Area = 10 square units  
 Perimeter = 10 length units  
☐ B Area = 10 square units  
 Perimeter = 10 length units

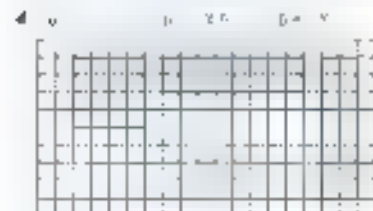
9. ☐ A Area = 10 square units  
 Perimeter = 10 length units  
☐ B Area = 10 square units  
 Perimeter = 10 length units



A 5x4 rectangle has a perimeter of 18 units and an area of 20 square units.  
A 5x4 rectangle has a perimeter of 18 units and an area of 20 square units.



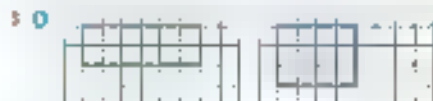
A 5x4 rectangle has a perimeter of 18 units and an area of 20 square units.  
A 5x4 rectangle has a perimeter of 18 units and an area of 20 square units.



## Accumulative Assessment 22

- 1 ☒ A ☐ B ☐ C ☐ D  
☐ 2 ☐ 3 ☐ 4 ☐ 5

- 2 ☐ A ☐ B ☐ C ☐ D  
☐ 2 ☐ 3 ☐ 4 ☐ 5

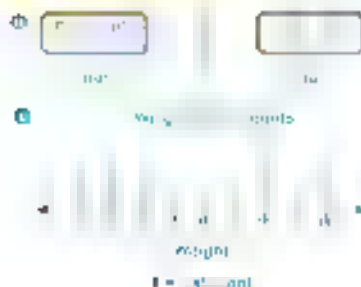


## 7

### Applications on Perimeter and Area

- 1 ☒ A ☐ B ☐ C ☐ D  
☐ 2 ☐ 3 ☐ 4 ☐ 5  
☐ 6 ☐ 7 ☐ 8 ☐ 9  
☐ 10 ☐ 11 ☐ 12  
☐ 13 ☐ 14 ☐ 15  
☐ 16 ☐ 17 ☐ 18  
☐ 19 ☐ 20 ☐ 21  
☐ 22 ☐ 23 ☐ 24  
☐ 25 ☐ 26 ☐ 27  
☐ 28 ☐ 29 ☐ 30  
☐ 31 ☐ 32 ☐ 33  
☐ 34 ☐ 35 ☐ 36  
☐ 37 ☐ 38 ☐ 39  
☐ 40 ☐ 41 ☐ 42  
☐ 43 ☐ 44 ☐ 45  
☐ 46 ☐ 47 ☐ 48  
☐ 49 ☐ 50 ☐ 51  
☐ 52 ☐ 53 ☐ 54  
☐ 55 ☐ 56 ☐ 57  
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## Grade Answers



## Exercises on Chapter 6

1

### Patterns of Multiplying by Multiples of 10 & Lesson 8 Chapter (5)

#### Multiplying by Multiples of 10

1. ☐ A. 20 ☐ B. 40 ☐ C. 60 ☐ D. 80

2. ☐ E. 100 ☐ F. 200 ☐ G. 300 ☐ H. 400

3. ☐ I. 500 ☐ J. 600 ☐ K. 700 ☐ L. 800

4. ☐ M. 900 ☐ N. 1000 ☐ O. 1100 ☐ P. 1200
1. ☐ A.  $10 \times 10 = 100$  ☐ B.  $10 \times 20 = 200$

2. ☐ C.  $10 \times 30 = 300$  ☐ D.  $10 \times 40 = 400$

3. ☐ E.  $10 \times 50 = 500$  ☐ F.  $10 \times 60 = 600$

4. ☐ G.  $10 \times 70 = 700$  ☐ H.  $10 \times 80 = 800$

5. ☐ I.  $10 \times 90 = 900$  ☐ J.  $10 \times 100 = 1000$
1. ☐ A. 100 ☐ B. 200 ☐ C. 300

2. ☐ D. 400 ☐ E. 500 ☐ F. 600

3. ☐ G. 700 ☐ H. 800 ☐ I. 900

4. ☐ J. 1000 ☐ K. 1100 ☐ L. 1200
1. ☐ A.  $10 \times 10 = 100$  ☐ B.  $10 \times 20 = 200$

2. ☐ C.  $10 \times 30 = 300$  ☐ D.  $10 \times 40 = 400$

3. ☐ E.  $10 \times 50 = 500$  ☐ F.  $10 \times 60 = 600$

4. ☐ G.  $10 \times 70 = 700$  ☐ H.  $10 \times 80 = 800$

5. ☐ I.  $10 \times 90 = 900$  ☐ J.  $10 \times 100 = 1000$

1. ☐ A. 100 ☐ B. 200 ☐ C. 300

2. ☐ D. 400 ☐ E. 500 ☐ F. 600

3. ☐ G. 700 ☐ H. 800 ☐ I. 900

4. ☐ J. 1000 ☐ K. 1100 ☐ L. 1200

5. ☐ M. 1300 ☐ N. 1400 ☐ O. 1500
1. ☐ A. 100 ☐ B. 200 ☐ C. 300

2. ☐ D. 400 ☐ E. 500 ☐ F. 600

3. ☐ G. 700 ☐ H. 800 ☐ I. 900

4. ☐ J. 1000 ☐ K. 1100 ☐ L. 1200

5. ☐ M. 1300 ☐ N. 1400 ☐ O. 1500

1. ☐ A. 100 ☐ B. 200 ☐ C. 300

2. ☐ D. 400 ☐ E. 500 ☐ F. 600

3. ☐ G. 700 ☐ H. 800 ☐ I. 900

4. ☐ J. 1000 ☐ K. 1100 ☐ L. 1200

5. ☐ M. 1300 ☐ N. 1400 ☐ O. 1500
1. ☐ A. 100 ☐ B. 200 ☐ C. 300

2. ☐ D. 400 ☐ E. 500 ☐ F. 600

3. ☐ G. 700 ☐ H. 800 ☐ I. 900

4. ☐ J. 1000 ☐ K. 1100 ☐ L. 1200

5. ☐ M. 1300 ☐ N. 1400 ☐ O. 1500

### Accumulative Assessment 24

1. ☐ A. 100 ☐ B. 200 ☐ C. 300

2. ☐ D. 400 ☐ E. 500 ☐ F. 600

3. ☐ G. 700 ☐ H. 800 ☐ I. 900

4. ☐ J. 1000 ☐ K. 1100 ☐ L. 1200

5. ☐ M. 1300 ☐ N. 1400 ☐ O. 1500
1. ☐ A. 100 ☐ B. 200 ☐ C. 300

2. ☐ D. 400 ☐ E. 500 ☐ F. 600

3. ☐ G. 700 ☐ H. 800 ☐ I. 900

4. ☐ J. 1000 ☐ K. 1100 ☐ L. 1200

5. ☐ M. 1300 ☐ N. 1400 ☐ O. 1500

## Strategies of Multiplying by 9

1 Answer by yourself!

2 Answer by yourself!

3 Answer by yourself!

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$$4 \times 9 = 36 \quad 10 \times 9 = 90 \quad 5 \times 9 = 45$$

4 Answer by yourself!

4	4	4	4	4	4	4	4	4	4
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$$4 \times 4 = 16 \quad 10 \times 4 = 40 \quad 5 \times 4 = 20$$

5 Answer by yourself!

1	0	0	0	0	0	0	0	0	0
---	---	---	---	---	---	---	---	---	---

$$9 \times 0 = 0 \quad 10 \times 0 = 0 \quad 5 \times 0 = 0 \quad 0 \times 5 = 0$$

6 Answer by yourself!

	0	0	0	0	0	0	0	0	0
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$$9 \times 0 = 0 \quad 10 \times 0 = 0 \quad 5 \times 0 = 0 \quad 0 \times 5 = 0$$

7 Answer by yourself!

--	--	--	--	--	--	--	--	--	--

$$4 \times 9 = 36 \quad 10 \times 9 = 90 \quad 5 \times 9 = 45$$

8 Answer by yourself!

	3		5		3	3		5	
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$$10 \times 9 = 90 \quad 10 \times 3 = 30 \quad 5 \times 9 = 45$$

9 Answer by yourself!

	3	5				5	5	5	
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$$10 \times 5 = 50 \quad 10 \times 3 = 30 \quad 5 \times 5 = 25$$

10 Answer by yourself!

									7
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$$4 \times 7 = 28 \quad 10 \times 7 = 70 \quad 5 \times 7 = 35$$

11 Answer by yourself!

7	9	0	4	4	7	9	0	4	4
---	---	---	---	---	---	---	---	---	---

$$4 \times 4 = 16 \quad 10 \times 4 = 40 \quad 5 \times 4 = 20$$

12 Answer by yourself!

13 Answer by yourself!

## Guide Answers

1 Answer by yourself!

2 Answer by yourself!

3 Answer by yourself!

$$10 \times 0 = 0 \quad 10 \times 0 = 0 \quad 5 \times 0 = 0$$

$$10 \times 4 = 40 \quad 10 \times 4 = 40 \quad 5 \times 4 = 20$$

$$10 \times 4 = 40 \quad 10 \times 4 = 40 \quad 5 \times 4 = 20$$

$$10 \times 4 = 40 \quad 10 \times 4 = 40 \quad 5 \times 4 = 20$$

$$10 \times 4 = 40 \quad 10 \times 4 = 40 \quad 5 \times 4 = 20$$

$$10 \times 4 = 40 \quad 10 \times 4 = 40 \quad 5 \times 4 = 20$$

## Accumulative Assessment [25]

$$10 \times 4 = 40 \quad 10 \times 4 = 40 \quad 5 \times 4 = 20$$

$$10 \times 4 = 40 \quad 10 \times 4 = 40 \quad 5 \times 4 = 20$$

2 Answer by yourself!

$$10 \times 4 = 40 \quad 10 \times 4 = 40 \quad 5 \times 4 = 20$$

$$10 \times 4 = 40 \quad 10 \times 4 = 40 \quad 5 \times 4 = 20$$

3 Answer by yourself!

$$10 \times 4 = 40 \quad 10 \times 4 = 40 \quad 5 \times 4 = 20$$

$$10 \times 4 = 40 \quad 10 \times 4 = 40 \quad 5 \times 4 = 20$$

## Facts on Multiplication and Addition

1 Answer by yourself!

$$10 \times 4 = 40 \quad 10 \times 4 = 40 \quad 5 \times 4 = 20$$

$$10 \times 4 = 40 \quad 10 \times 4 = 40 \quad 5 \times 4 = 20$$

$$10 \times 4 = 40 \quad 10 \times 4 = 40 \quad 5 \times 4 = 20$$

$$10 \times 4 = 40 \quad 10 \times 4 = 40 \quad 5 \times 4 = 20$$

$$10 \times 4 = 40 \quad 10 \times 4 = 40 \quad 5 \times 4 = 20$$

$$10 \times 4 = 40 \quad 10 \times 4 = 40 \quad 5 \times 4 = 20$$

2 Answer by yourself!

$$10 \times 4 = 40 \quad 10 \times 4 = 40 \quad 5 \times 4 = 20$$

$$10 \times 4 = 40 \quad 10 \times 4 = 40 \quad 5 \times 4 = 20$$

$$10 \times 4 = 40 \quad 10 \times 4 = 40 \quad 5 \times 4 = 20$$

$$10 \times 4 = 40 \quad 10 \times 4 = 40 \quad 5 \times 4 = 20$$

$$10 \times 4 = 40 \quad 10 \times 4 = 40 \quad 5 \times 4 = 20$$

$$10 \times 4 = 40 \quad 10 \times 4 = 40 \quad 5 \times 4 = 20$$

$$10 \times 4 = 40 \quad 10 \times 4 = 40 \quad 5 \times 4 = 20$$

$$10 \times 4 = 40 \quad 10 \times 4 = 40 \quad 5 \times 4 = 20$$

$$10 \times 4 = 40 \quad 10 \times 4 = 40 \quad 5 \times 4 = 20$$

$$10 \times 4 = 40 \quad 10 \times 4 = 40 \quad 5 \times 4 = 20$$

$$10 \times 4 = 40 \quad 10 \times 4 = 40 \quad 5 \times 4 = 20$$

$$10 \times 4 = 40 \quad 10 \times 4 = 40 \quad 5 \times 4 = 20$$

$$10 \times 4 = 40 \quad 10 \times 4 = 40 \quad 5 \times 4 = 20$$

$$10 \times 4 = 40 \quad 10 \times 4 = 40 \quad 5 \times 4 = 20$$

## Circle Answers

- 1 ☐ A ☐ B ☐ C ☐ D
- 2 ☐ A ☐ B ☐ C ☐ D
- 3 ☐ A ☐ B ☐ C ☐ D
- 4 ☐ A ☐ B ☐ C ☐ D
- 5 ☐ A ☐ B ☐ C ☐ D
- 6 ☐ A ☐ B ☐ C ☐ D
- 7 ☐ A ☐ B ☐ C ☐ D
- 8 ☐ A ☐ B ☐ C ☐ D
- 9 ☐ A ☐ B ☐ C ☐ D
- 10 ☐ A ☐ B ☐ C ☐ D

## Accumulative Assessment [26]

- 1 ☐ A ☐ B ☐ C ☐ D
- 2 ☐ A ☐ B ☐ C ☐ D
- 3 ☐ A ☐ B ☐ C ☐ D
- 4 ☐ A ☐ B ☐ C ☐ D
- 5 ☐ A ☐ B ☐ C ☐ D
- 6 ☐ A ☐ B ☐ C ☐ D
- 7 ☐ A ☐ B ☐ C ☐ D
- 8 ☐ A ☐ B ☐ C ☐ D
- 9 ☐ A ☐ B ☐ C ☐ D
- 10 ☐ A ☐ B ☐ C ☐ D

4

## Comparing and Ordering Numbers in Different Forms

- 1 ☐ A ☐ B ☐ C ☐ D
- 2 ☐ A ☐ B ☐ C ☐ D
- 3 ☐ A ☐ B ☐ C ☐ D
- 4 ☐ A ☐ B ☐ C ☐ D
- 5 ☐ A ☐ B ☐ C ☐ D
- 6 ☐ A ☐ B ☐ C ☐ D
- 7 ☐ A ☐ B ☐ C ☐ D
- 8 ☐ A ☐ B ☐ C ☐ D
- 9 ☐ A ☐ B ☐ C ☐ D
- 10 ☐ A ☐ B ☐ C ☐ D

5

Number	of the Expanded Digit	Place of the Expanded Digit
400,000	4	hundred thousands
10	1	ten thousands
1	1	thousands
100	1	hundreds
10	1	tens
1	1	ones

- 1 ☐ A ☐ B ☐ C ☐ D
- 2 ☐ A ☐ B ☐ C ☐ D
- 3 ☐ A ☐ B ☐ C ☐ D
- 4 ☐ A ☐ B ☐ C ☐ D
- 5 ☐ A ☐ B ☐ C ☐ D
- 6 ☐ A ☐ B ☐ C ☐ D
- 7 ☐ A ☐ B ☐ C ☐ D
- 8 ☐ A ☐ B ☐ C ☐ D
- 9 ☐ A ☐ B ☐ C ☐ D
- 10 ☐ A ☐ B ☐ C ☐ D

5

## Accumulative Assessment [27]

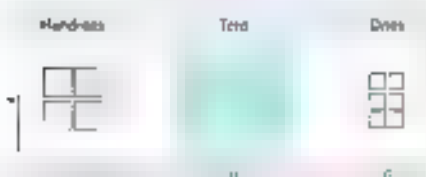
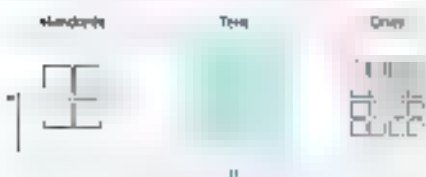
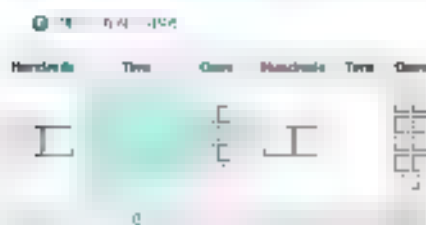
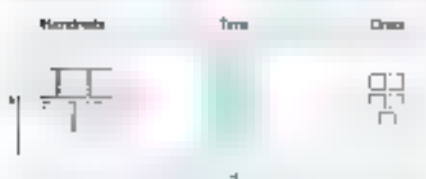
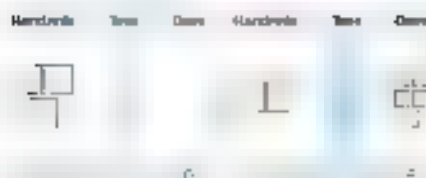
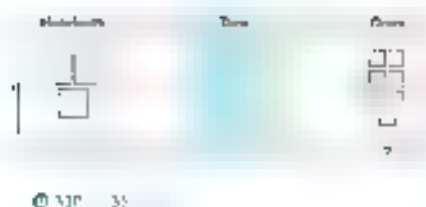
- 1 ☐ A ☐ B ☐ C ☐ D
- 2 ☐ A ☐ B ☐ C ☐ D
- 3 ☐ A ☐ B ☐ C ☐ D
- 4 ☐ A ☐ B ☐ C ☐ D
- 5 ☐ A ☐ B ☐ C ☐ D
- 6 ☐ A ☐ B ☐ C ☐ D
- 7 ☐ A ☐ B ☐ C ☐ D
- 8 ☐ A ☐ B ☐ C ☐ D
- 9 ☐ A ☐ B ☐ C ☐ D
- 10 ☐ A ☐ B ☐ C ☐ D

5

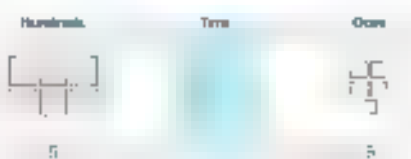
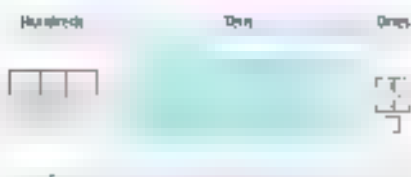
## Addition Strategies

- 1 ☐ A ☐ B ☐ C ☐ D
- 2 ☐ A ☐ B ☐ C ☐ D
- 3 ☐ A ☐ B ☐ C ☐ D
- 4 ☐ A ☐ B ☐ C ☐ D
- 5 ☐ A ☐ B ☐ C ☐ D
- 6 ☐ A ☐ B ☐ C ☐ D
- 7 ☐ A ☐ B ☐ C ☐ D
- 8 ☐ A ☐ B ☐ C ☐ D
- 9 ☐ A ☐ B ☐ C ☐ D
- 10 ☐ A ☐ B ☐ C ☐ D

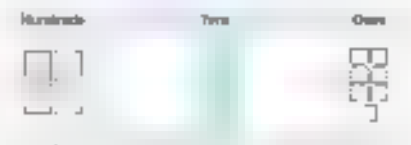
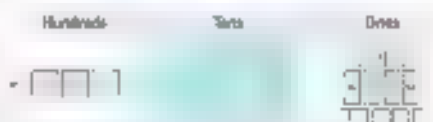
# Guide Answers



Question 7: 11



Question 10: 11





## Grade Answers

Hauptzeile	Zeile	Diagonal	Nebenzeile

2

[illegible][illegible]

3

	Problem	Work & Answer	Sum
1	$2 + 3 =$	$2 + 3 = 5$	5
2	$4 + 5 =$	$4 + 5 = 9$	9
3	$6 + 7 =$	$6 + 7 = 13$	13
4	$8 + 9 =$	$8 + 9 = 17$	17
5	$10 + 11 =$	$10 + 11 = 21$	21
6	$12 + 13 =$	$12 + 13 = 25$	25
7	$14 + 15 =$	$14 + 15 = 29$	29
8	$16 + 17 =$	$16 + 17 = 33$	33
9	$18 + 19 =$	$18 + 19 = 37$	37
10	$20 + 21 =$	$20 + 21 = 41$	41

-

# Accumulative Assessment 26

1. ☐ 18,154   ☐ 362,053   ☐ 40,000  
☐ 51,194   ☐ 211,194
2. ☐  $10 \times 10 = 100$    ☐  $100 \times 100 = 10,000$
3. ☐ 0.87   ☐ 9.9   ☐ 50.15  
☐ 100   ☐ 100   ☐ 10,000   ☐ 500,000  
☐ 450

6

## Subtraction Strategies

1. ☐ 28   ☐ 24   ☐ 10

Thousands	Tens	Ones
2	8	0
2	4	0

Check:  $28 - 24 = 4$

2. ☐ 457   ☐ 10

Thousands	Tens	Ones
4	5	7
4	5	7

Check:  $457 - 10 = 447$

3. ☐ 10   ☐ 10

Thousands	Tens	Ones
1	0	0
1	0	0

Check:  $289 + 454 = 743$

## Guide Answers

1.  $50 \times 10 = 500$

Thousands	Tens	Ones
5	0	0
5	0	0

Check:  $50 \times 10 = 500$

2.  $4 \times 10 = 40$

Thousands	Hundreds	Tens	Ones
4	0	0	0
4	0	0	0

Check:  $238 + 4,240 = 4,478$

3.  $10 \times 10 = 100$

Thousands	Hundreds	Tens	Ones
1	0	0	0
1	0	0	0

Check:  $10 \times 10 = 100$

4.  $5 \times 34 = 170$     $5 \times 10 = 50$

Thousands	Hundreds	Tens	Ones
5	0	0	0
5	0	0	0

Check:  $1,525 + 5,765 = 7,290$





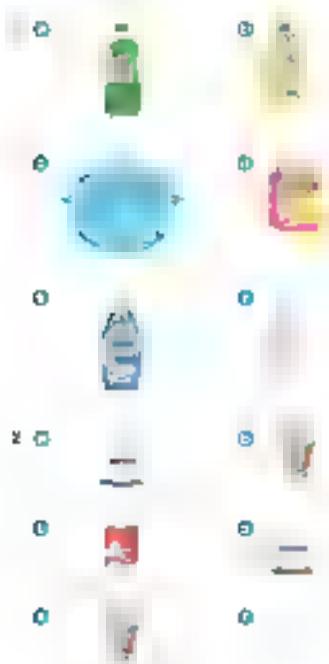
- ☐ 40.  $\ln 0^+ = 4.19$   
☐ 30.  $\ln 0^+ = 4.19$ ,  $\ln 0^+ = 4.19$   
☐ 20.  $\ln 0^+ = 4.19$   
☐ 10.  $\ln 0^+ = 4.19$














































































## Accumulative Assessment 30

- 1 164,345 403,403 0  
 760,000 25,796
- 2 9 0 5 X 7 9.4' + 5 X 3  
 9 11 0.3 + 11
- 3 0.04 14  
 0.00 0.00 0.00 0.00 0.00  
 5.3 180

889

Capacity Reading Capacity



- |   |   |   |
|---|---|---|
| 1.  <b>1.1</b>   | 2.  <b>2.1</b>   | 3.  <b>3.1</b>   |
| 4.  <b>4.1</b>   | 5.  <b>5.1</b>   | 6.  <b>6.1</b>   |
| 7.  <b>7.1</b>   | 8.  <b>8.1</b>   | 9.  <b>9.1</b>   |
| 10.  <b>10.1</b> | 11.  <b>11.1</b> | 12.  <b>12.1</b> |
| 13.  <b>13.1</b> | 14.  <b>14.1</b> | 15.  <b>15.1</b> |
| 16.  <b>16.1</b> | 17.  <b>17.1</b> | 18.  <b>18.1</b> |
| 19.  <b>19.1</b> | 20.  <b>20.1</b> | 21.  <b>21.1</b> |
| 22.  <b>22.1</b> | 23.  <b>23.1</b> | 24.  <b>24.1</b> |
| 25.  <b>25.1</b> | 26.  <b>26.1</b> | 27.  <b>27.1</b> |
| 28.  <b>28.1</b> | 29.  <b>29.1</b> | 30.  <b>30.1</b> |
| 31.  <b>31.1</b> | 32.  <b>32.1</b> | 33.  <b>33.1</b> |
| 34.  <b>34.1</b> | 35.  <b>35.1</b> | 36.  <b>36.1</b> |
| 37.  <b>37.1</b> | 38.  <b>38.1</b> | 39.  <b>39.1</b> |
| 40.  <b>40.1</b> | 41.  <b>41.1</b> | 42.  <b>42.1</b> |
| 43.  <b>43.1</b> | 44.  <b>44.1</b> | 45.  <b>45.1</b> |
| 46.  <b>46.1</b> | 47.  <b>47.1</b> | 48.  <b>48.1</b> |
| 49.  <b>49.1</b> | 50.  <b>50.1</b> | 51.  <b>51.1</b> |
| 52.  <b>52.1</b> | 53.  <b>53.1</b> | 54.  <b>54.1</b> |
| 55.  <b>55.1</b> | 56.  <b>56.1</b> | 57.  <b>57.1</b> |
| 58.  <b>58.1</b> | 59.  <b>59.1</b> | 60.  <b>60.1</b> |
| 61.  <b>61.1</b> | 62.  <b>62.1</b> | 63.  <b>63.1</b> |
| 64.  <b>64.1</b> | 65.  <b>65.1</b> | 66.  <b>66.1</b> |
| 67.  <b>67.1</b> | 68.  <b>68.1</b> | 69.  <b>69.1</b> |
| 70.  <b>70.1</b> | 71.  <b>71.1</b> | 72.  <b>72.1</b> |
| 73.  <b>73.1</b> | 74.  <b>74.1</b> | 75.  <b>75.1</b> |
| 76.  <b>76.1</b> | 77.  <b>77.1</b> | 7   |

- ④ In `millis()`
- ⑤ In `LTPC - millis`
- ⑥ `print(millis)`
- ⑦ `int = millis / milliseconds`
- ⑧ `int = millis / 1000`
- ⑨ `int = millis / 1000`
- ⑩ `4000 / milliseconds = 4 / sec`
- ⑪ `6000 / milliseconds = 6 / sec`
- ⑫ `10000 / milliseconds = 10 / sec`
- ⑬ `10000 / milliseconds = 10 / sec`
- ⑭ To measure the capacity of the capacitor we use multimeter.
- ⑮ To measure the capacity of the capacitor, we use multimeter.
- ⑯ The filter is used to measure capacity.
- ⑰ The millie is used to measure capacity.
- ⑱ The graduated cylinder is used to measure capacity.

- |                    |          |
|--------------------|----------|
| 1. $\frac{1}{2}$ m | 2. 1.5 m |
| 3. 10 m            | 4. 100 m |
| 5. 100 m           | 6. 100 m |

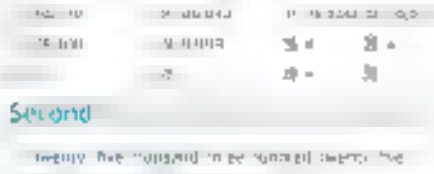
## Accumulative Assessment 31

- 



4

11. **Finalist** **Accepted** **Verified** **Completed** **Review**



—bought the land with the money

5

75 0000	25 00	75 0000
10 0000	25 0000	75 0000
100 000	25 0000	75 0000
1000 00	25 0000	75 0000

3

4

- ▲ Seventy-four thousand, five hundred seventy-three
- $70,000 + 500 + 70 + 3$
- ▲ 74 Thousand + 5 Hundred + 7 Ten + 3 Ones

# Grade Answers

2. a. 600,000

b. 100 hundred billion thousands one hundred and 0

c. 600,000 000,000 100,000 000 000

d. 6 thousands 0 hundreds 0 tens 0 ones

3. a. 100 100 100 100 100 100 100 100

b. 100 100 100 100 100 100 100 100

4. a. 100 100 100 100 100 100 100 100

b. 100 100 100 100 100 100 100 100

5. a. 100 100 100

Hundreds Tens Ones

100

100

Hundreds

Tens

Ones

100

10

10

Hundreds

Tens

Ones

100

10

10

Hundreds

Tens

Ones

100

10

10

6. 400

Hundreds

Tens

Ones

400

400

Hundreds

Tens

Ones

400

400

400

Hundreds

Tens

Ones

400

400

400

Hundreds

Tens

Ones

400

400

400

Hundreds

Tens

Ones

400

400

400

Thousands

Hundreds

Tens

Ones

400

400

400

400

400

# Grade Answers

6.  $\$782 = 226 + 556$

$100 + 20 + 5$

$500 + 80 + 2 = 602$

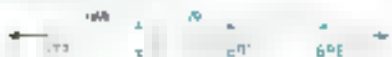
$250 + 10 + 10$

$100 + 50$

$100 + 50$

$100 + 50$

7.  $73 + 10 = 83$



8.  $6,725 + 286 = 7,011$



9.  $4,815 + 587 = 5,402$



10.  $245 + 368 = 613$

11.  $7,438 + 2,470 = 9,908$

12.  $1,454 + 555 = 2,009$

13.  $954 + 100 = 1,054$

14.  $0 + 100 = 100$

15.  $258 + 750 = 1,008$

Answer Key for Grade 3 Math

1.  $4 + 5 = 9$

2.  $4 + 4 = 8$

3.  $9 + 9 = 18$

4.  $4 + 10 = 14$

5.  $5 + 10 = 15$

6.  $100 + 100 = 200$

7.  $50 + 50 = 100$

8.  $30 + 30 = 60$

9.  $100 + 100 = 200$

10.  $5 + 5 = 10$

11.  $5 + 5 = 10$

12.  $5 + 5 = 10$

13.  $5 + 5 = 10$

14.  $5 + 5 = 10$

15.  $5 + 5 = 10$

16.  $5 + 5 = 10$

17.  $5 + 5 = 10$

18.  $5 + 5 = 10$

19.  $5 + 5 = 10$

20.  $5 + 5 = 10$

21.  $5 + 5 = 10$

22.  $5 + 5 = 10$

23.  $5 + 5 = 10$

24.  $5 + 5 = 10$

25.  $5 + 5 = 10$

26.  $5 + 5 = 10$

27.  $5 + 5 = 10$

28.  $5 + 5 = 10$

29.  $5 + 5 = 10$

30.  $5 + 5 = 10$

31.  $5 + 5 = 10$

32.  $5 + 5 = 10$

33.  $5 + 5 = 10$

34.  $5 + 5 = 10$

35.  $5 + 5 = 10$

36.  $5 + 5 = 10$

37.  $5 + 5 = 10$

38.  $5 + 5 = 10$

39.  $5 + 5 = 10$

40.  $5 + 5 = 10$

41.  $5 + 5 = 10$

42.  $5 + 5 = 10$

43.  $5 + 5 = 10$

44.  $5 + 5 = 10$

45.  $5 + 5 = 10$

46.  $5 + 5 = 10$

47.  $5 + 5 = 10$

48.  $5 + 5 = 10$

49.  $5 + 5 = 10$

50.  $5 + 5 = 10$

51.  $5 + 5 = 10$

52.  $5 + 5 = 10$

53.  $5 + 5 = 10$

54.  $5 + 5 = 10$

55.  $5 + 5 = 10$

56.  $5 + 5 = 10$

57.  $5 + 5 = 10$

58.  $5 + 5 = 10$

59.  $5 + 5 = 10$

60.  $5 + 5 = 10$



So,  $4 \times 5 = 5 \times 4$

20)  $\square$   $\triangle 1 \times 20$   $\triangle 20 \times 1$

$\triangle 2 \times 10$   $\triangle 10 \times 2$

$\triangle 4 \times 5$   $\triangle 5 \times 4$

$\blacktriangle$  Factors of 20 are 1, 2, 4, 5, 10, 20

$\triangle 1 \times 15$   $\triangle 15 \times 1$

$\triangle 2 \times 9$   $\triangle 9 \times 2$

$\triangle 3 \times 6$   $\triangle 6 \times 3$

$\blacktriangle$  Factors of 18 are 1, 2, 3, 6, 9, 18

$\triangle 1 \times 15$   $\triangle 15 \times 1$

$\triangle 3 \times 3$   $\triangle 3 \times 3$

$\blacktriangle$  Factors of 15 are 1, 3, 5, 15

$\triangle 1 \times 9$   $\triangle 9 \times 1$

$\triangle 3 \times 3$

$\blacktriangle$  Factors of 7 are 1, 7

21

$\triangle (5 \times 4) + (5 \times 4)$

$= 12 + 12 = 24$

$\triangle (5 \times 4) + (5 \times 4)$

$= 20 + 15 = 35$

$\triangle (3 \times 4) + (3 \times 4)$

$= 12 + 10 = 22$

$\triangle (5 \times 2) + (5 \times 2)$

$= 10 + 14 = 24$

6)  $5 \times 7 = 35$  nuts

7)  $5 \times 4 = 20$  apples

8)  $5 \times 10 = 50$  eggs

9)  $12 \div 3 = 4$  rats



10)  $15 \div 5 = 3$  oranges



22

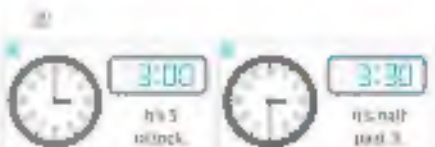


23) Answer by yourself

## Geometry and Measurement

- 1)  $\square$  30  $\square$  600  $\square$  300  
 $\triangle$  2,000  $\triangle$  70  $\triangle$  900  
 $\square$  60  $\square$  50  $\square$  45  
 $\triangle$  24  $\triangle$  2,000  $\triangle$  10,000  
 $\square$  50  $\square$  meter  $\square$  millimeter  
 $\square$  centimeter  $\square$  2  $\square$  40  
 $\square$  5  $\square$  pentagon  $\square$  rhombus  
 $\square$  trapezoid  $\square$  rectangle  $\square$  milliliter  
 $\square$  liter  $\square$  length  $\square$  capacity  
 $\square$  time  $\square$  capacity  $\square$  length
- 2)  $\square$  40  $\square$  800  $\square$  400  
 $\triangle$  5,000  $\triangle$  90  $\triangle$  40  
 $\square$  1  $\square$  24  $\square$  1000  
 $\square$  10,000  $\square$  90  $\square$  4  
 $\square$  4  $\square$  hexagon  $\square$  equal  
 $\square$  equal  $\square$  milliliter  $\square$  centimeter  
 $\square$  capacity  $\square$  time

24)  $\square$



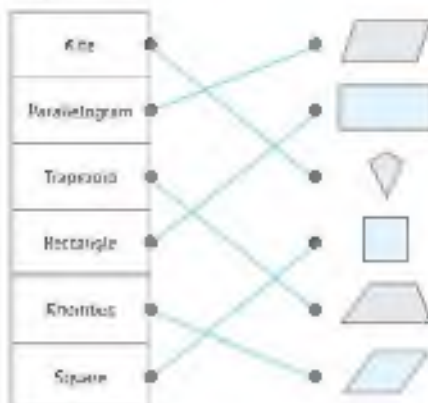


## Guide Answers



Number of Sides	3	4	5
Name	Triangle	Quadrilateral	Pentagon

Number of Sides	6	7	8
Name	Hexagon	Heptagon	Octagon



- ☒ Perimeter = 12 cm     ☒ Perimeter = 10 cm  
☒ Perimeter = 10 cm

Shape	1	2	3	4	5
Perimeter	16	20	36	22	14
Area	13	25	40	21	10

# Models

## Model 1

- ☒ 25,025     ☐ 5 x 4     ☐ 500  
☐ 10,080     ☐ 52
- ☒ 3     ☐ Thousands  
☐ 45,045     ☐ 30 past 9     ☐ 4
- ☒ 42,074, 42,204, 42,340, 42,407, 42,420  
☒ Area = 40 square units  
     Perimeter = 24 length units  
     Area = 35 square units  
     Perimeter = 74 length units  
☒  $245 \div 183 = 4 \text{ R } 13$

## Model 2

- ☒ 3,921     ☐ 405,405     ☐ 10  
☐ 300     ☐ 5
- ☒ 90,000     ☐ 19,009  
☐ 20     ☐ equal     ☐ 594,414
- ☒ 7,050     ☐ 72     ☐ 6,419     ☐ 5  
☒ 5:40     ☐ 20 to 6  
☒ 5:5     ☐ Quarter past 5  
☒  $8 \times 4 = 32$  Legs

## Model 3

- ☒ 4 x 6     ☐ 50,000     ☐ 100  
☐ perimeter     ☐ 100
- ☒  $(9 \times 10) (9 \times 2) = 90 \times 18 = 1620$      ☐ 5  
☐ Hundreds     ☐ 1     ☐ 10,214
- ☒  $<$      ☐  $=$      ☐  $>$      ☐  $\neq$   
☐  $3,250 - 625 = 625$  LE     ☐  $625$   
☒ Batteries     ☐ Feet

## Model 4

- ☒ 40     ☐ 5,000     ☐ 405  
☐ 6,000     ☐ 9
- ☒ 7 x 4  
☐ 1 One = 2 Hundreds = 81 Thousands = 0 Tens  
☐ 4     ☐  $(1 \times 4) = 40 + 20 = 60$   
☐ 45,044
- ☒ 10,000, 0,000, 1,000, 1,000, 014  
☐  $36 \div 4 = 9$  Graytons



- ☐ 4 rows of 4      ☐  $4 \times 4 = 16$   
☐ 8 rows of 5      ☐  $8 \times 6 = 48$

### Model 5

- 1 ☐ 203,550      ☐  $5 \times 7$       ☐ 24  
☐ 42      ☐ 99,990  
 2 ☐  $c$       ☐ Hundreds Thousands  
☐  $42 = 42,000$       ☐ rectangle      ☐  $3 \times 10^3$   
 3 ☐  $756 + 825 = 679$   
☐  $0.542 - 5.394 = 7.305$

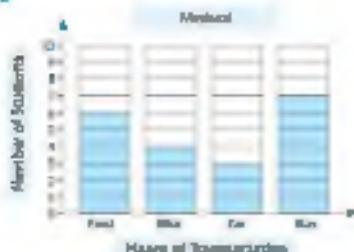


• Check:  $2,279 + 1,000 = 3,279$

• Answer by yourself

### Model 6

- 1 ☐ 20,000      ☐ 7      ☐ 20,000  
☐ 200,000      ☐ 8  
 2 ☐ 20,000      ☐ Ten Thousands      ☐ 15  $\times 10$   
☐ 6  $\times 100$       ☐ hexagon  
 3 ☐ 2,684 , 0.384 , 0.485 , 5.684 , 4.382  
☐  $756 + 808 = 1,564$  Lf  
☐  $c$



### Model 7

- 1 ☐ 21,000      ☐ 1      ☐ 5  
☐ 10,000      ☐ 9  
 2 ☐ 5      ☐ 20,000  
☐  $5 \times 10 + 5 \times 5$       ☐ 16, 15, 11      ☐ 5 past 8  
 3 ☐ 10,000      ☐ 38      ☐ 6,130      ☐ 7  
☐  $1 \times 56$       ☐  $16 \times 2$

- ☐  $2 \times 8$       ☐  $2 \times 7$   
☐  $4 \times 4$   
☐ The factors of 16 are 1, 2, 4, 8, 16  
☐  $1 \times 8$       ☐  $8 \times 1$   
☐  $2 \times 4$       ☐  $4 \times 2$   
☐ The factors of 8 are 1, 2, 4, 8

### Model 8

- 1 ☐ 4      ☐ 30,578      ☐ 5  
☐ capacity      ☐ 100,000  
 2 ☐  $1 \times 9$       ☐ 0  
☐ Two hundred four thousand, twenty  
☐ 0      ☐ 2, 1, 0, 35  
 3 ☐  $>$       ☐  $>$       ☐  $<$       ☐  $=$   
☐  $543 - 825 = 287.6$   
☐  $c$



### Model 9

- 1 ☐ 500,000      ☐ length      ☐ 2,003  
☐ 100      ☐ 0  
 2 ☐ 10      ☐ 35  
☐ 11,010      ☐ 105,000      ☐  $5 \times 3$   
 3 ☐ 605,000 , 900,000 , 95,000 , 50,000 , 9,000  
☐  $1.00 = 50 = 150$       ☐  $150 = 150 = 100$   
☐ 3 rows of 4      ☐  $3.86 + 28$   
☐ 2 groups of 5      ☐  $4.55 + 10$

### Model 10

- 1 ☐ 1,000      ☐ time      ☐ 3.3.15  
☐ 100,000      ☐ Thousands  
 2 ☐ 20,000 + 1,000 = 21,000      ☐ 15,000  
☐  $6 \times 10$       ☐ XXXX0, XXXX0      ☐ 77,758  
 3 ☐  $c$

$$\begin{array}{r} 900 + 90 + 5 \\ 600 + 20 + 8 \\ \hline 1,000 + 70 + 14 + 1,000 \end{array}$$

•



• Answer by yourself



# تركيب واستخدام لعبة Multiplication Square



1

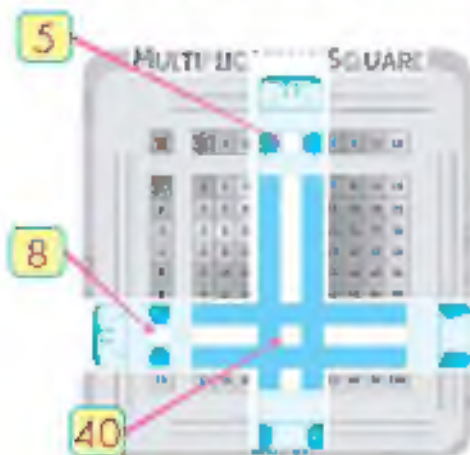
ثم يفصل الأجزاء والتخلص من الأجزاء الزائدة



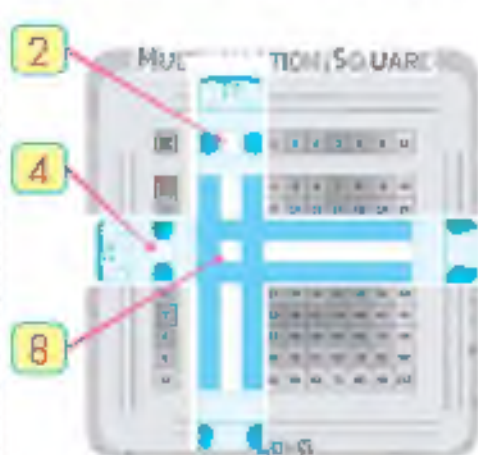
2

ثم يتم تركيب الأجزاء المتحركة كما هو موضح

ثم يتم تركيب الأجزاء المتحركة للعمليات الحسابية المطلوبة كما هو موضح بالمسكين:



$$5 \times 8 = 40$$



$$2 \times 4 = 8$$